

43ult
1912/13

THE UNIVERSITY OF DENVER PUBLISHES FIVE
DEPARTMENTAL CATALOGS
THIS IS CATALOG NUMBER ONE

University of Denver

FOUNDED IN 1864 BY JOHN EVANS

CATALOG 1912-1913

College of Liberal Arts

UNIVERSITY BULLETIN

Published Monthly by the University of Denver
at University Hall, University Park, Colorado

Entered as second-class matter January 30, 1911, at the post office at University
Park, Colorado, under the Act of July 16, 1894

VOL. 13

MAY, 1912

No. 5

DEPARTMENTS OF THE

University of Denver

AT UNIVERSITY PARK

COLLEGE OF LIBERAL ARTS

GRADUATE SCHOOL

WARREN ACADEMY

SUMMER SCHOOL

For information, address the Chancellor
University Park, Colorado

IN THE HEART OF DENVER

DENVER LAW SCHOOL, 1330 ARAPAHOE STREET

For catalog, address Dean George C. Manly
E. & C. Building

COLORADO COLLEGE OF DENTAL SURGERY

1340 ARAPAHOE STREET

For Catalog, Address Dean W. T. Chambers
California Building

SCHOOL OF COMMERCE, ACCOUNTS AND FINANCE

1330 ARAPAHOE STREET

For catalog, address Dean J. B. Geijsbeek
Equitable Building

SATURDAY COLLEGE FOR TEACHERS

Y. M. C. A. BUILDING, 16th AVE. & LINCOLN ST.

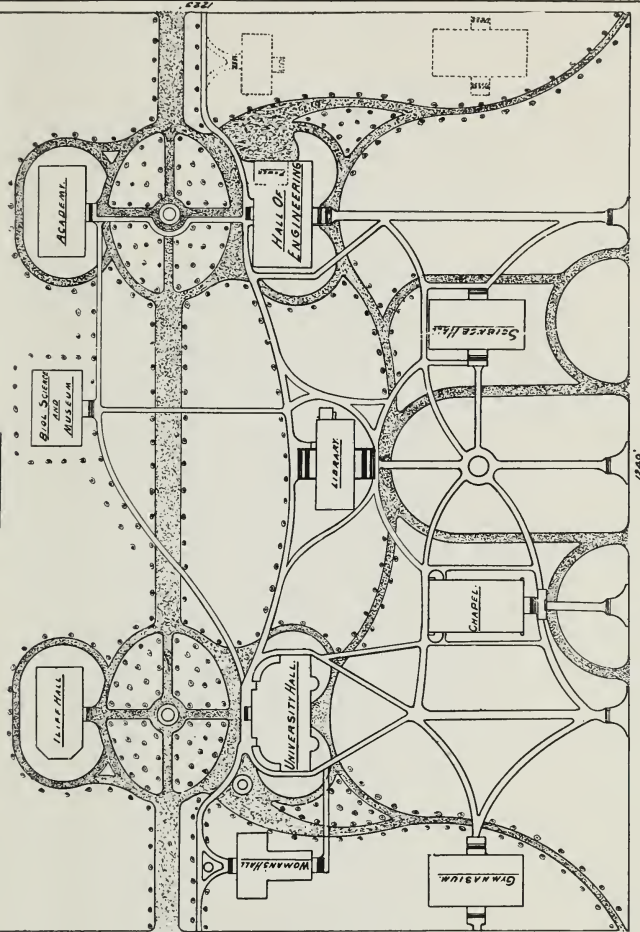
For information, address Dr. D. E. Phillips
University Park, Colo.

CLIFF AVE.

DENVER UNIVERSITY CAMPUS.

DRAWING BY W.C. BAUER

Scale 1"=100'

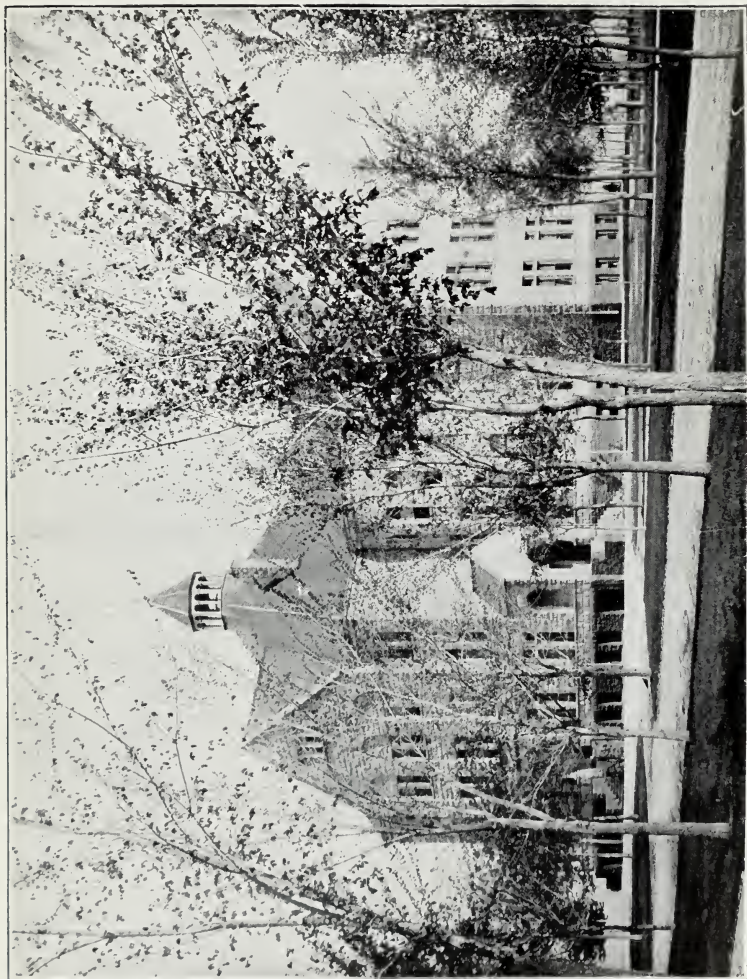


University Ave.

EVANS AVE.

CAMPUS PLAN

MAY 1909.



UNIVERSITY HALL



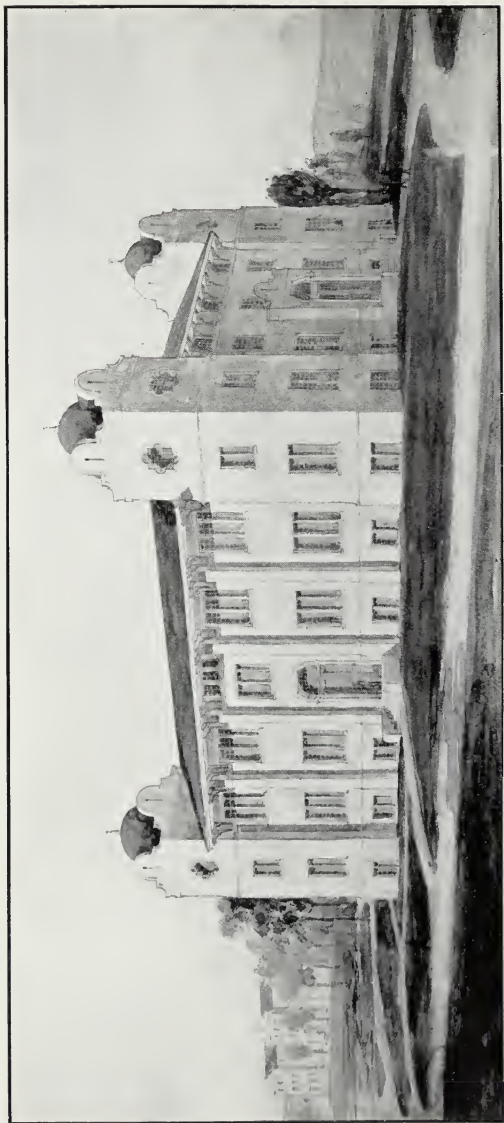
THE LIBRARY



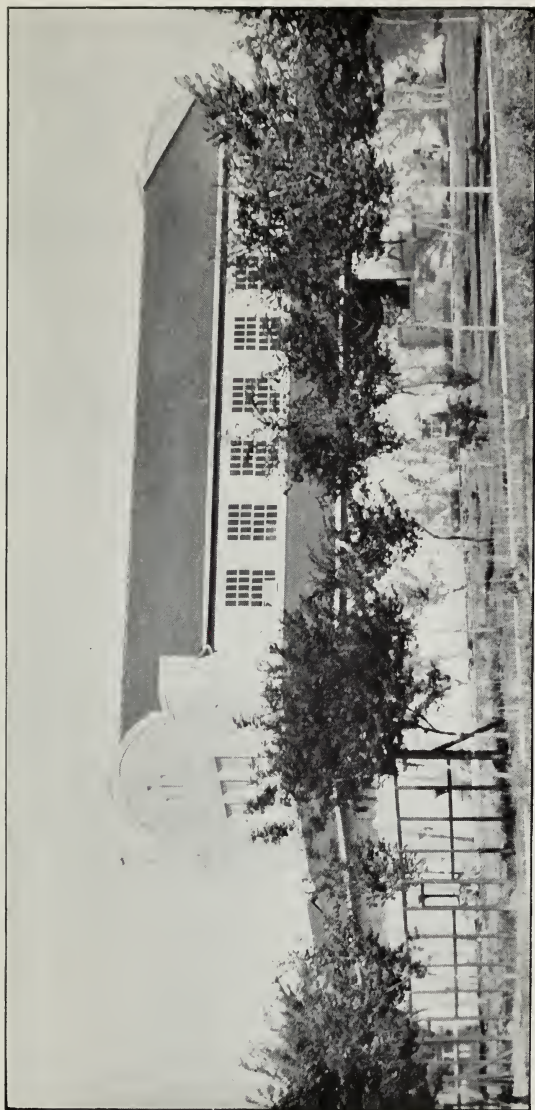
THE OBSERVATORY



THE GREAT TELESCOPE



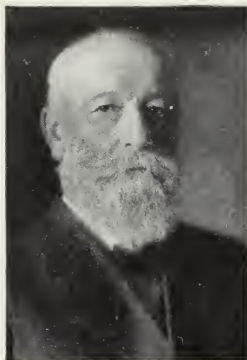
This picture is made from the architect's perspective drawing of the new Science Hall. The building will be 90 x 135 and will be fire-proof. As appears from the drawing, it will have three full stories with mezzanine floors at the north and south ends of the building. The building will, therefore, contain four stories at the north and south ends. It will be done in pressed brick outside and inside and will have a roof of red tile. The towers will be slightly different from the towers as shown in the picture and will be more attractive. The building will be completed in August. The Departments of Chemistry and Physics will occupy the entire building. These Departments will be transferred to this building during the month of August.



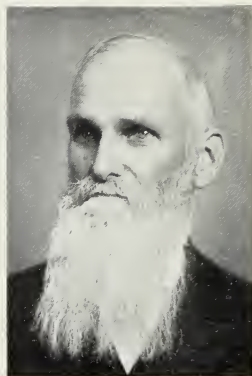
THE GYMNASIUM



R. H. BEGGS



A. E. REYNOLDS



J. C. SHATTUCK



F. J. CHAMBERLIN



W. G. EVANS



E. M. CRANSTON



A. L. DOUD

THE EXECUTIVE COMMITTEE

University of Denver

and Colorado Seminary

Catalog

THE LIBRARY OF THE
AUG 29 1936
UNIVERSITY OF ILLINOIS

College of Liberal Arts
Graduate School



1912-1913

Session days are indicated by bold-face type

Session days are indicated by bold-face type

| JULY | | | | | | | AUGUST | | | | | | | SEPTEMBER | | | | | | |
|------|------|-------|------|-------|------|------|--------|------|-------|------|-------|------|------|-----------|------|-------|------|-------|------|------|
| Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
| .. | 1 | 2 | 3 | 4 | 5 | 6 | .. | .. | .. | .. | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 28 | 29 | 30 | 31 | .. | .. | .. | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 29 | 30 | .. | .. | .. | .. | .. |
| .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | |

| OCTOBER | | | | | | | NOVEMBER | | | | | | | DECEMBER | | | | | | |
|---------|------|-------|------|-------|------|------|----------|------|-------|------|-------|------|------|----------|------|-------|------|-------|------|------|
| Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. |
| .. | .. | 1 | 2 | 3 | 4 | 5 | .. | .. | .. | .. | 1 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 27 | 28 | 29 | 30 | 31 | .. | .. | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 29 | 30 | 31 | .. | .. | .. | .. |
| .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | |

| JANUARY | | | | | | | FEBRUARY | | | | | | | MARCH | | | | | | | |
|---------|------|-------|------|-------|------|------|----------|------|-------|------|-------|------|------|-----------|------|-------|------|-------|------|------|---|
| Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | |
| .. | .. | .. | 1 | 2 | 3 | 4 | .. | .. | .. | .. | .. | .. | 1 | .. | .. | .. | .. | .. | .. | 1 | |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | |
| 26 | 27 | 28 | 29 | 30 | 31 | .. | 23 | 24 | 25 | 26 | 27 | 28 | .. | 23 | 24 | 25 | 26 | 27 | 28 | 29 | |
| .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 30 | 31 | .. | .. | .. | .. | .. | |
| APRIL | | | | | | | MAY | | | | | | | JUNE | | | | | | | |
| Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | |
| .. | .. | .. | 1 | 2 | 3 | 4 | 5 | .. | .. | .. | .. | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | |
| 27 | 28 | 29 | 30 | .. | .. | .. | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 29 | 30 | .. | .. | .. | .. | .. | |
| .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | |
| JULY | | | | | | | AUGUST | | | | | | | SEPTEMBER | | | | | | | |
| Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | |
| .. | .. | .. | 1 | 2 | 3 | 4 | 5 | .. | .. | .. | .. | 1 | 2 | 9 | .. | 1 | 2 | 3 | 4 | 5 | 6 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | |
| 27 | 28 | 29 | 30 | 31 | .. | .. | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 28 | 29 | 30 | .. | .. | .. | .. | |
| .. | .. | .. | .. | .. | .. | .. | 31 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | |
| OCTOBER | | | | | | | NOVEMBER | | | | | | | DECEMBER | | | | | | | |
| Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | Sun. | Mon. | Tues. | Wed. | Thur. | Fri. | Sat. | |
| .. | .. | .. | 1 | 2 | 3 | 4 | .. | .. | .. | .. | .. | .. | 1 | .. | 1 | 2 | 3 | 4 | 5 | 6 | |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | |
| 26 | 27 | 28 | 29 | 30 | | | | | | | | | | | | | | | | | |

Calendar, 1912

MAY 31, Friday—Class Day.

JUNE 2, Sunday—Baccalaureate Sermon in the Gymnasium.

JUNE 3, Monday—Warren Academy Graduation.

JUNE 4, Tuesday—Meeting of the Society of the University of Denver and Annual Meeting of the Board of Trustees of Colorado Seminary. Departmental Dinners.

JUNE 5, Wednesday—Alumni Day. Chancellor's Reception and Evening Collegiate Concert.

JUNE 6, Thursday—Commencement, in the Auditorium.

JUNE 11, Tuesday—Spring Quarter ends.

JUNE 17-JULY 26, Monday to Friday—Summer School.

SEPTEMBER 9-10, Monday and Tuesday, 9-12 a. m. and 1-3 p. m. Opening Days—Examination of Certificates for Entrance. Registration of Students.

SEPTEMBER 11, Wednesday—Recitations begin.

SEPTEMBER 13, Friday—Reception by the Christian Associations.

SEPTEMBER 15, Sunday—Convocation Sermon.

SEPTEMBER 20, Friday—The Chancellor's Reception.

NOVEMBER 25-27, Monday to Wednesday—Registration for Second Quarter.

NOVEMBER 28-29, Thursday and Friday—Thanksgiving Recess. Fall quarter ends.

DECEMBER 2, Monday—Opening Day of Winter Quarter. Registration ends.

DECEMBER 21, Saturday—Christmas Recess begins.

1913.

JANUARY 7, Tuesday—Winter Quarter resumes.

JANUARY 12, Sunday—Convocation Sermon.

JANUARY 30, Thursday—Day of Prayer for Colleges.

MARCH 6-7, Thursday and Friday—Registration for Third Quarter.

MARCH 7, Friday—Winter Quarter closes.

MARCH 10, Monday—Opening day of Spring Quarter. Registration ends at noon.

MARCH 16-23—Spring Vacation from Palm Sunday to Easter.

MARCH 24, Monday—Spring Quarter resumes.

MARCH 30, Sunday—Convocation Sermon.

APRIL 18, Friday—Arbor Day.

APRIL 25, Friday—High School Reception.

MAY 30, Friday—Memorial Day and Class Day.

JUNE 1, Sunday—Baccalaureate Sermon.

JUNE 2, Monday—Warren Academy Graduation.

JUNE 3, Tuesday—Meeting of the Society of the University of Denver, and Annual Meeting of the Board of Trustees of Colorado Seminary. Departmental Dinners.

JUNE 4, Wednesday—Alumni Day, Chancellor's Reception, and Evening Collegiate Concert.

JUNE 5, Thursday—Commencement.

JUNE 10, Tuesday—Spring Quarter ends.

JUNE 16-JULY 25, Monday-Friday—Summer School.

SEPTEMBER 8-9, Monday and Tuesday—Registration Days.

SEPTEMBER 10, Wednesday—Recitations begin for College Year 1913-1914.

The Colorado Seminary

BOARD OF TRUSTEES

TERM EXPIRES 1912

ROBERT H. BEGGS, A.M., LL.D.....University Park
FROST CRAFT, A.M., D.D.....University Park
J. STANLEY EDWARDS, A.B.....McPhee Bldg., Denver
J. F. HARRIS, D.D.....Canon City
BEN F. SALZER.....Central Savings Bank, Denver
ELIZABETH ILIFF WARREN.....University Park
HENRY W. WARREN, A.M., D.D., LL.D.....University Park

TERM EXPIRES 1913

ALEXANDER LEE DOUD, A.M., LL.B.....E. & C. Bldg., Denver
FRANK R. HOLLENBACK, A.B., D.D..173 South Grant Street, Denver
WILLIAM H. HOWELL, A.M.....Trinidad
JOHN J. LACE, D.D.....Grand Junction
ALFRED R. KING, LL.D.....Delta
EDGAR E. SHUMWAY.....University Park
CHARLES B. WILCOX, A.M., D.D.....1830 Sherman Ave., Denver

TERM EXPIRES 1914

FREDERICK J. CHAMBERLIN.....677 Emerson Street, Denver
EARL M. CRANSTON, A.M., LL.B.....901 Emerson Street, Denver
WILLIAM G. EVANS, A.B.....1310 Bannock Street, Denver
WILLIAM L. HARTMAN, A.M., LL.B....305 Jackson Street, Pueblo
JOS. C. SHATTUCK, A.M., Ph.D.....University Park
DAVID D. FORSYTH, A.B., D.D.....University Park
L. WIRT MARKHAM.....Lamar

TERM EXPIRES 1915

AUGUSTUS L. CHASE, Ph.D., D.D.....University Park
HENRY M. MAYO, Ph.D., D.D.....Pueblo
WILLIAM S. ILIFF, A.B.....University Park
WILLIAM LENNOX.....Colorado Springs
ALBERT E. REYNOLDS.....830 Equitable Bldg., Denver
HENRY M. TELLER, LL.D.....Denver
EDWARD J. WILCOX.....1269 Columbine Street, Denver

OFFICERS OF THE BOARD OF TRUSTEES

WILLIAM G. EVANS.....*President*
ALEXANDER LEE DOUD.....*Vice-President*
EARL M. CRANSTON.....*Vice-President*
ROBERT H. BEGGS.....*Secretary*
JOS. C. SHATTUCK.....*Treasurer*
H. L. BEARDSLEY.....*Assistant Secretary*

EXECUTIVE COMMITTEE

| | |
|--------------------|------------------|
| WILLIAM G. EVANS | ROBERT H. BEGGS |
| ALEXANDER L. DOUD | F. J. CHAMBERLIN |
| JOS. C. SHATTUCK | EARL M. CRANSTON |
| ALBERT E. REYNOLDS | |

The Colorado Conference

THE UNIVERSITY COMMITTEE

Laymen—John R. Bell, Chas. A. Bradley, Jos. W. Gilluly, Geo. C. Manly, Frank McDonough, Hubert L. Shattuck, Harry G. Shuck, Jas. R. Thorpe, all of Denver; Samuel H. Clammer, Fort Collins; John T. Clough, Greeley; Edward Fair, Boulder; William B. Stockham, Delta; J. H. Williams, Pueblo.

Ministers—O. W. Auman, F. W. Bretnall, R. A. Chase, J. A. Davis, E. N. Edgerton, M. D. Hornbeck, N. H. Lee, O. K. Maynard, W. D. Phifer, H. G. Porter, W. T. Scott, Merle N. Smith, B. T. Vincent, S. B. Warner.

THE UNIVERSITY VISITORS

R. R. Adams, R. E. Bird, W. A. Brown, W. M. Dye, R. H. Forrester, C. W. Hancher, F. A. Hawke, M. A. Head, E. E. Higley, L. J. Hole, T. J. Hooper, C. W. Huett, J. A. Johnson, S. H. Kirkbride, F. T. Krueger, G. W. McCreery, O. L. Orton, H. M. Pingree, W. F. Pitner, A. F. Ragatz, C. A. Rowand, C. F. Seitter, Eugene H. Smith, C. B. Steele, C. O. Thibodeau, James Thomas, C. E. Wakefield, A. J. Waller. Superintendent English Mission in New Mexico, Superintendent Utah Mission, and Superintendent Wyoming Mission.

The University of Denver

MEMBERS OF THE SOCIETY

W. F. STEELE, A.M., S.T.D.....University Park
D. D. FORSYTH, D.D.....University Park
A. L. CHASE, Ph.D., D.D.....University Park
F. R. HOLLENBACK, A.M., D.D.....Denver
H. M. MAYO, Ph.D., D.D.....Pueblo
J. J. LACE, D.D.....Grand Junction
HENRY A. BUCHTEL, D.D., LL.D.....University Park

And all the Trustees of the Colorado Seminary

TRUSTEES

WILLIAM G. EVANS, A.B.....Tramway Bldg., Denver
ALEXANDER LEE DOUD, A.M., LL.B.....E. & C. Bldg., Denver
EARL M. CRANSTON, A.M., LL.B.....Equitable Bldg., Denver
ROBERT H. BEGGS, A.M., LL.D.....University Park
JOSEPH C. SHATTUCK, Ph.D.....University Park
F. J. CHAMBERLIN.....Denver
ALBERT E. REYNOLDS.....Equitable Bldg., Denver

Charter

COLORADO SEMINARY

AN ACT TO INCORPORATE THE COLORADO SEMINARY

APPROVED MARCH 5. 1864

Be It Enacted by the Council and House of Representatives of Colorado Territory:

SECTION 1. That John Evans, Samuel H. Elbert, W. N. Byers, H. Burton, A. B. Case, J. G. Vawter, A. G. Gill, W. D. Pease, Edwin Scudder, J. H. Morrison, Warren Hussey, J. W. Smith, D. H. Moffat, Jr., R. E. Whittsitt, C. A. Cook, John Cree, Amos Steck, J. M. Chivington, J. B. Doyle, Henry Henson, Amos Widner, John T. Lynch, Milo Lee, J. B. Chaffee, Lewis Jones, O. A. Willard, W. H. H. Loveland and Robert Berry be and they are hereby constituted a body politic and corporate for the purpose of founding, directing and maintaining an institution of learning, to be styled the Colorado Seminary, and in manner hereinafter prescribed to have perpetual succession, with full power to sue and be sued, plead and be impleaded, adopt and alter at pleasure a seal, acquire, hold and convey property, real, personal and mixed, to the extent they may judge necessary for carrying into effect the objects of this corporation, and, generally, to perform such other acts as may be necessary and proper therefor.

SEC. 2. Said Trustees, at their first meeting, shall be divided into four classes of seven in each class, which class shall hold office for one, two, three and four years

respectively, dating from the first day of July, 1864; their successors shall be appointed whenever terms expire, or vacancies for any cause exist, by the annual conference of the Methodist Episcopal Church, within whose bounds the City of Denver may be included, but all of said Trustees and their successors shall continue in office until their successors are elected.

SEC. 3. No test of religious faith shall ever be applied as a condition of admission into said Seminary, but the Trustees shall have power to adopt all proper rules and regulations for the government of the conduct of teachers and pupils, and the management of all affairs pertaining to said institution.

SEC. 4. They shall have full power to confer all degrees and emoluments customary to be given by similar institutions.

SEC. 5. Such property as may be necessary for carrying out the design of the Seminary in the best manner, while used exclusively for such purposes, shall be free from all taxation.

SEC. 6. In all cases, a majority of the Board of Trustees shall constitute a quorum for transacting any business, or said majority may vest the power of the Trustees in an Executive Committee, or agent of their number, at pleasure.

SEC. 7. This shall be deemed a public act, and be in force and take effect from and after its passage.

UNIVERSITY OF DENVER

ARTICLES OF INCORPORATION OF THE UNIVERSITY OF DENVER
ADOPTED 1889, AND AMENDED JUNE 8, 1898

ARTICLE I. The name of this society shall be the University of Denver.

ARTICLE II. The object of this society shall be the advancement of the educational interests of Colorado; the promotion of all the sciences, arts and learned professions; and to form a University which shall have power to establish a system of instruction in any or all of the departments of learning; to create fellowships; to appoint a Board of Examiners, and, upon examination or satisfactory recommendation, to confer marks of distinction and all degrees, honorary or otherwise, usual to a University, upon all such candidates as shall be found worthy thereof.

ARTICLE III. The members of this society shall be the Secretary, for the time being, of the Colorado Annual Conference of the Methodist Episcopal Church, and the secretaries, while in office, of such annual conferences as shall hereafter be organized within the territory now occupied by the said Colorado Annual Conference; the Presiding Elders, for the time being, of the aforesaid annual conference or conferences; the President, for the time being, of the Colorado Seminary; the members of the Board of Trustees, for the time being, of the Colorado Seminary.

ARTICLE IV. The officers of this society shall consist of a Board of seven Trustees, all of whom shall be members of the society, who shall be elected by ballot annually on the first Tuesday in June, and shall hold their office until their successors shall have been chosen, and the fol-

lowing named persons, viz.: H. W. Warren, E. M. Cranston, Jos. C. Shattuck, J. W. Gilluly, C. B. Spencer, W. C. Madison and J. H. Merritt shall constitute such Board of Trustees until the first regular election, and until their successors are elected; and if, for any reason, such election is not held on said day in June, it may be held at any subsequent regular or called meeting, due notice of such election having been served by mail or personal service on all members of the society. There shall be a President, Vice-President, Secretary and Treasurer, and such other officers as shall be provided for by the By-Laws of the society, all of whom shall be elected by the Board of Trustees.

ARTICLE V. The Trustees of this society shall have power to make all such necessary and prudential by-laws, not inconsistent with the Constitution and laws of the State, as they may deem proper for the management of the affairs of the society.

ARTICLE VI. This Constitution may be altered or amended by a two-thirds vote of all the members of this society.

Under the charter and articles just printed, the following Departments are organized as schools of the University:

- College of Liberal Arts.
- Graduate School.
- School of Law.
- School of Dentistry.
- School of Commerce.
- Summer School.
- Saturday College for Teachers.
- Warren Academy.

The schools of Law, Dentistry and Commerce are situated in the center of Denver, within two blocks of the postoffice, and within one block of the center of the tramway system of street cars. The College of Liberal Arts, the Graduate School, the Warren Academy and the Summer School are located at University Park, within the city limits, but removed from the distractions of the city. It is thirty minutes' ride from the center of the city, and it is the choicest location in or about Denver. It is higher than the Capitol Building, and commands a fine view of the city. The mountains are in full view for a distance of two hundred miles, with the valleys and foothills between. No healthier location can be found. Liquor selling and saloons are forever excluded.

The University buildings at the Park are: University Hall, The Chamberlin Observatory, the Carnegie Library, the Gymnasium, Wycliffe Hall, and Templin Hall. University Hall, costing \$80,000, is devoted exclusively to purposes of instruction, and is the home of the College of Liberal Arts. The Chamberlin Observatory is housed in two buildings, costing, with the telescopes, more than \$50,000. Wycliffe Hall is a home for young men. Templin Hall is a home for young women. It is expected that the new Science Hall will be occupied in September, 1912. The new Chapel may be ready for occupancy within a year.

The University buildings at Fourteenth and Arapahoe streets are the Dental Building, at 1340 Arapahoe street, and the Law and Commerce Building, at 1330 Arapahoe street.

Historical Data

The historical data here presented are the justification of the statement of the Colorado Supreme Court that this is "the pioneer school of higher learning in this State." The charter of the Colorado Seminary was granted by the territorial legislature at Golden, on the 5th of March, in 1864. In the fall of that year, the work of instruction was commenced under the direction of the Rev. George Richardson. That was ten years before any similar work was begun elsewhere in the Rocky Mountain region. In 1880, the Colorado Seminary developed into the University of Denver. The Colorado Seminary is now, and always will be, the property-holding corporation, for the reason that no other educational charter so liberal in its terms has ever been given in Colorado. The degrees are given by the corporation known as The University of Denver. The institution is therefore known as the University of Denver and Colorado Seminary. With the Fall Quarter of 1912, the University enters upon its forty-ninth academic year. The first university degrees conferred in Colorado were given by this institution in April of 1882.

Faculty

1912-1913

HENRY AUGUSTUS BUCHTEL, A.M., D.D., LL.D.,

De Pauw University.

Chancellor.

HERBERT ALONZO HOWE, A.M., Sc.D., LL.D.

University of Cincinnati, University of Chicago, Boston University and
University of Denver.

Dean and Professor of Astronomy;

Director of the Chamberlin Observatory.

AMMI BRADFORD HYDE, A.M., S.T.D., Litt.D.

Wesleyan University, Syracuse University and University of Denver.

Lecturer on Philology and Linguistics.

HERBERT EDWIN RUSSELL, A.M.

Wesleyan University and Johns Hopkins University.

Professor of Pure Mathematics.

*JAMES EDWARD LE ROSSIGNOL, A.M., Ph.D., LL.D.

McGill University, University of Leipzig, Clark University and University of Denver.

Professor of Economics and Social Science.

*ANNE GRACE WIRT, Ph.M.

Syracuse University, University of Berlin, and Universite de Geneve.

Professor of German and Italian.

WILBER DWIGHT ENGLE, A.M., Ph.D.

Albion College and Columbia University.

Professor of Chemistry.

IRA EUGENE CUTLER, A.M.

Albion College, University of Denver and University of Chicago.

Professor of Biology.

DANIEL EDWARD PHILLIPS, A.M., Ph.D.

University of Nashville and Clark University.

Professor of Philosophy and Education.

*On leave of absence.

WILBUR FLETCHER STEELE, A.M., S.T.D.

Syracuse University, Boston University, University of Berlin and University of Oxford.

Professor of Biblical Science and Religion.

*FRANK HUNT HURD ROBERTS, A.M., Ph.D.

Ohio University, Kenyon College and University of Denver.

Professor of History and Political Science.

GERTRUDE HARPER BEGGS, A.B., Ph.D.

University of Denver and Yale University.

Professor of Greek.

ARTHUR HENRY HARROP, A.M., Ph.D.

Ohio Wesleyan University, Harvard University and Boston University.

Professor of Latin.

IDA KRUSE MCFARLANE, A.M.

Vassar College.

Mary Lowe Dickinson Professor of English.

PERLE SHALE KINGSLEY, A.B.

Central College

Professor of Public Speaking.

SAMUEL ALEXANDER LOUGH, A.M., Ph.D.

Baker University, Boston University and Northwestern University.

Professor of English and Ethics.

REUBEN EDSON NYSWANDER, A.M., Ph.D.

Indiana University and Cornell University.

Professor of Physics.

DAVID SHAW DUNCAN, A.M., Ph.D.

Glasgow United-Free Church College, Harvard University and University of Denver.

Professor of History.

LOUIS HENRY LIMPER, A.M.

German Wallace College, Robert College, Université de Lausanne and Princeton University.

Professor of Romance Languages.

GEORGE A. WARFIELD, A.B., LL.B., A.M.

Nebraska Wesleyan, University of Nebraska, University of Oregon, University of California, University of Wisconsin and Washington University.

Professor of Economics and Sociology.

MARTHA LOESCHER CROOK, A.B.

University of Denver and University of Berlin.

Professor of German.

*On leave of absence.

OWEN BERTRAM TROUT, A.M.

Ohio Wesleyan University and University of Denver.

Registrar; Principal Warren Academy.

FROST CRAFT, A.M., D.D.

De Pauw University.

Lecturer on Sociology.

JAMES LAWRENCE GARTLAND, Ph.B.

Brown University.

Instructor in Journalism.

ANNE McKEEN SHULER

Western College for Women.

Dean of Women.

MABEL RILLING

Northwestern College and Yale School of Physical Education.

*Associate Dean of Women and Director
of Physical Education for Women.*

ELISABETH McNEAL Ph.B.

University of Denver and Columbian University.

Librarian.

MARGARET PACKARD TAUSSIG, A.M.

University of Denver, University of Paris and College de France.

Instructor in Modern Languages.

JENNIE CHARSKY SPIVAK, B.S.

University of Denver.

Instructor in Russian.

ARTHUR J. FYNN, A.M., Ph.D.

Tufts College and University of Colorado.

*Professor of Ethnology and Archaeology
in the Saturday College.*

EDNA SCHEIDT, A.B.

University of Denver.

Instructor in German in the Saturday College.

LESLIE WILES SCOFIELD, A.M.

University of Denver.

Assistant to Professor of History.

DELOS ANNETTE JAMES, A.M.

University of Denver.

Assistant to Professor of Biology.

WILLIAM FORD DUNCAN

EDWIN ARTHUR REES

Assistants to Professor of Chemistry.

CHARLES COREY BROWN

ELEANOR FRANCES SEILER

Assistants to Professor of Physics.

KATE HOWLAND, A.B.
HELEN HOWLAND, A.B.

Assistants to Professor of Philosophy and Education.

PHILIP ALEXANDER MUNZ

Instructor in German.

OLIVE EVELYN BRADBURY
JESSE MORRIS CHASE
MARY LILIAN CRAISE
EMMA BLANCHE CUNNINGHAM
CHARLES WILLIAM CUNO, A.B.
BERTHA VIRGINIA DENHAM
ABBIE HAYS DOUGHTY, A.M.
ZETA SWEET FIKE, A.B.
LILLIAN HALCYONE GREEN
BESSE ERMA HELWIG, A.B.
ANNE MERRIMAN HENRY, A.B.
LORENA WINCHELL HOCKING, A.M.
ELIZABETH BUCHANAN HOYT
RAYMOND LEE KURTZ
NELLIE LEOLA LUTHER
GRACE ELEANOR PHELPS, A.M.
VIOLA TYSON PILLSBURY, A.B.
EUNICE GERTRUDE ROBINSON, A.B.

Assistants in English.

OSCAR VOGEL

Assistant in Mathematics.

OLIN PIERCE LEE, A.M.

Assistant in Economics.

RALPH A. STOW, C.E.

University of Michigan.

Secretary Young Men's Christian Association.

VIOLA TYSON PILLSBURY, A.B.

University of Denver.

Secretary Young Women's Christian Association.

HIRAM EDWIN WILSON

Yale University.

Director of Physical Education for Men.

CLEMENT FRANCIS CROWLEY, L.L.B.

University of Denver.

Coach for Athletic Teams.

ALFRED G. HOEL

Supervisor of Practice Teaching in the Summer School.

MARGARET LENORE NORINE
EVELYN HELEN HOSMER

Secretaries to the Chancellor.

General Requirements for Admission

The College of Liberal Arts presupposes a high-school or academy course of a standard grade. Candidates for admission must offer satisfactory testimonials of good character. Students from other institutions must present letters of honorable dismissal.

Students who do not desire to obtain the Bachelor's degree, are permitted to try special studies for which their previous training may seem to fit them.

The Faculty reserves the right to reject an applicant or to drop a student at any time for lack of diligence, or for incompetency, or to require him to take more work. Special students are amenable to the same general rules and regulations as regular students.

Admission to the Freshman Class

Work done in high or other secondary schools in preparation for college is estimated in units, a unit being a course of study involving five weekly recitations, each at least forty-five minutes in length, throughout an academic year of thirty-six weeks or more. Two recitation periods of work in a laboratory may count as one recitation. Four recitations a week, through a school year, in a given study, bring a credit of only four-fifths of a unit. In estimating the amount of credit for a given course of study, the ground covered by it is considered, as well as the time spent upon it.

A full description of the standard high school units is given on pages 26-30.

They are summarized in the following list; the maximum number of units accepted in each subject is indicated by the numeral placed directly after it:

English, 4; History, 4; Latin, 4; German, 4; French, 4; Mathematics, 4; Greek, 3; Spanish, 2; Physiographic Science (Physiography, Geology, Astronomy), 2; Biological Science (Botany, Zoology, Physiology), 2; Physics, 1; Chemistry, 1; Psychology, 1; Political Economy, 1; Manual Training (Mechanical Drawing, Shopwork, Domestic Science), 3; Stenography—combined, if desired, with Typewriting, 1. However, the amount of credit accepted for a combination of Manual and Stenographic Training will not exceed 3 units.

Any student who has earned fifteen standard high school units is received as a full Freshman.

A student who has obtained more than fifteen standard high school units in an accredited school will obtain equitable credit in college for his excess high school work.

One who, on entrance, has not obtained the full fifteen units may take any collegiate study which he is, in the judgment of the instructor, qualified to undertake.

As stated above, fifteen units give full Freshman rank, but a student who wishes to obtain a collegiate degree, specializing in some particular subjects, would do well to get a start in these subjects during his high school course—if possible—and also to guide himself by the following considerations.

Before a Bachelor's degree is granted to a student he must have to his credit the following standard high school units, or equivalents for some of them in collegiate studies; that is, if he has not taken some of them in his high school course he may get credit for them by examination or otherwise, after he has entered college; or he may take certain collegiate studies which the Faculty decide to be equivalent to the omitted subjects. Eleven of these units are in required subjects and four are elective.

| | | |
|-----------------------------------|---|-------|
| English | 3 | units |
| Languages other than English..... | 4 | " |
| Mathematics | 2 | " |
| History | 1 | " |
| Physics | 1 | " |
| Electives | 4 | " |

The two required units in Mathematics are Elementary Algebra through simultaneous quadratics, and Plane Geometry with numerous exercises. It is, however, very desirable that a student present three units of Mathematics for entrance, the third being composed of a combination of Solid Geometry and a second course in Algebra; this second course should be a review and extension of the course in Elementary Algebra, through the subject of Logarithms.

Though but one unit of History is required, two are advised. Similarly, at least two units of Science are recommended.

Not less than a unit will be accepted in Physics, in Chemistry, or in any foreign language.

If the degree of A.B. in Classics (see p. 32) is to be won, at least two language units must be in Latin, and two others in Latin, or Greek, or a combination of them.

Likewise for the degree of A.B. in Letters (see p. 32), two language units must be in Latin or Greek, or a combination of them.

For the degrees (see p. 32) of A.B. in History and Sociology, A.B. in Mathematics, A.B. in Philosophy, and A.B. in Science no Latin or Greek is required, but the desirability of a knowledge of Latin, at least, is emphasized.

The Standard Units

The system of units adopted is chiefly based upon the requirements of the College Entrance Examination Board; the examinations given by the Board are accepted

by the leading universities of the country, and are becoming national standards.

ENGLISH.—The first three of the four possible units are devoted to drill in grammar, composition and rhetoric, together with the reading and study of the books recommended for 1913 by the National Conference on Uniform Entrance Requirements in English.

HISTORY.—The first unit is Ancient History—especially Greek and Roman—with a short study of the chief events of the early Middle Ages, down to the death of Charlemagne. The second unit is Mediæval and Modern European History, from the death of Charlemagne onward. For the third and fourth units, English and American History, respectively, are advised. Such textbooks as those of Myers, Botsford, Allen, Coman and Kendall, Channing, McLaughlin, etc., should be supplemented by outside reading, the results of which should be discussed with discrimination, and recorded in the notebooks of the students.

LATIN.—The first unit embraces a careful study of paradigms, grammatical principles and sentence-building, as developed in such books as Collar and Daniell's First Year Latin, and Via Latina. For the second unit, the reading of Books I-IV of Caesar's Gallic War, with prose composition once a week and sight translation, is sufficient. The third unit comprises six of Cicero's Orationes, with prose composition once a week, and sight translation. The fourth unit comprehends Books I-VI of Vergil's Aeneid, with so much of prosody as relates to accent, versification in general, and dactylic hexameter; sight translation and composition. Equivalents in any Latin authors may be offered in place of any of the reading indicated above.

GERMAN.—The first unit comprises abundant drill in easy colloquial sentences, and the rudiments of grammar, together with the reading of from 75 to 100 pages

of simple texts. The second unit continues the drill of the first unit, with more of conversation, and the reading of from 150 to 200 pages of easy stories and plays. In the third unit, about 400 pages of moderately difficult prose and poetry are read, and there is much practice in composition and conversation. For the fourth unit, about 500 pages of good literature are studied in a broad and thorough way.

FRENCH.—The work in this language is similar—in general—to that in German, but more reading can be done in each unit. In the first unit, from 100 to 175 pages are to be read; in the second, from 250 to 400 pages of easy prose; in the third, from 400 to 600 pages of moderately difficult matter; in the fourth, from 600 to 1,000 pages of the works of classical and modern authors.

MATHEMATICS.—For the first unit, Elementary Algebra, through simultaneous quadratic equations, is taken; for the second, Plane Geometry, with numerous exercises; for the third, Solid Geometry, together with a thorough review of the first unit, and an extension of it through the subject of Logarithms. The fourth unit is rarely offered for entrance, and usually embraces College Algebra and Plane Trigonometry.

GREEK.—For the first unit, White's Beginners' Greek Book, together with the reading of about 25 pages of Xenophon's Anabasis, is recommended. The second unit embraces the completion of four books of the Anabasis, together with a thorough grammatical review. The third unit is made up of Books IV-VI of Homer's Iliad, or an equivalent. Composition and sight reading are practiced in connection with the second and third units.

SPANISH.—The first unit comprises the rudiments of Spanish grammar, with conversational exercises and the reading of from 100 to 175 pages of easy texts. In the second unit, the grammatical and conversational work of

the first unit is continued, and from 250 to 400 pages of modern prose are read.

PHYSIOGRAPHIC SCIENCE.—Under this head come Physiography, Geology and Astronomy, which may be combined in various proportions to suit local conditions. A unit may well be made by combining Physiography with Geology or Astronomy. For Physiography the works of Tarr and Davis are suggested; for Geology, those of Dana, Le Conte and Scott; for Astronomy, those of Young and Howe. In a year of Physiography, there should be forty or more practical exercises performed by the student.

BIOLOGICAL SCIENCE.—A unit may be given in Botany or in Zoology; or it may well be a combination of Botany and Zoology. If preferred, half units may be given in these subjects, and in Physiology. Note-book work is an essential part of the course.

PHYSICS.—The text-book work for a unit is well represented by Millikan and Gale's First Course in Physics; laboratory work, embracing at least forty exercises, is an essential part of this unit. Less than a unit in Physics will not be accepted.

CHEMISTRY.—Remsen's Chemistry (Briefer Course) covers the text-book work for a unit, and must be supplemented by at least forty laboratory exercises. Less than a unit in Chemistry will not be accepted.

PSYCHOLOGY AND POLITICAL ECONOMY.—These subjects are not often offered for entrance; a unit made by a combination of the two will be accepted, or half a unit may be allowed for each.

MECHANICAL DRAWING.—A full unit in Drawing includes geometrical plane and solid figures, and the simple pieces of machinery, with a fair knowledge of the rules of perspective and light and shade, as applied in free-hand sketching. At least twenty drawings are to be com-

pleted. Not less than two recitation periods a day for a school year should be thus occupied, in order to make a full unit.

SHOP WORK.—This includes woodwork, forging and machine work, two hours of laboratory instruction being counted as one hour of recitation.

DOMESTIC SCIENCE.—This subject, as taught in Manual Training High Schools, is given credit according to the extent and character of the work accomplished.

STENOGRAPHY.—This may be combined with Typewriting if desired. A unit includes a full scholastic year, five times a week.

High School Certificates

Certificates from high schools or other secondary schools should give detailed statements as to individual studies, and should be presented on or before the day of matriculation.

The desired data for each subject are the number of weeks spent on it, the number of recitations per week, the standing attained, and the text-book used. In many cases other information, such as the number of orations read in Cicero, will be asked for. The more complete the information, the more satisfactory the certificate. Blank forms for these certificates will be furnished from the Registrar's office, if desired.

Diplomas are not accepted in place of certificates, unless the foregoing facts are stated on them.

Certificates will be inspected in University Hall on Monday and Tuesday, September 9 and 10. Special arrangements may be made for any desired examinations.

Credit given in a particular subject upon a student's entrance may afterwards be withdrawn if his work in continuing that subject is unsatisfactory.

Admission to Advanced Standing

Students who have completed one or more years of collegiate work in approved colleges, and who bring satisfactory certificates specifying studies and grades, will receive credit for the work which they have accomplished. These certificates should embrace the high school or preparatory work, as well as the collegiate.

Those who do not come from other colleges will be examined in those studies for which they may ask credit, unless they present acceptable certificates for the same. The amount of such credit cannot usually be determined without a personal interview.

The scholastic attainments of each applicant for advanced standing are compared with our own standards of admission and graduation, in order to determine the work which he must do to win a Bachelor's degree. In no case is a promise made that an applicant will receive exactly the same class standing that he has enjoyed in the institution from which he comes.

Credits given for work done in another school may afterwards be withdrawn or modified if the work which they represent is found to be seriously defective, or if the student covers practically the same ground in one of our courses.

Requirements for Graduation

Before receiving a Bachelor's degree the candidate must have satisfied the entrance requirements for the degree as set forth on pages 24-30, and must have chosen his college work in accordance with the following scheme:

Fifteen recitations a week, or their equivalents, for four years, are to be taken. The expression, "one hour," means one recitation a week throughout a quarter. Fifteen recitations a week for one quarter are thus called

"15 hours." Since there are three regular quarters in the college year, 45 hours constitute a full year's work. The four years' course, therefore, embraces 180 hours.

A *major* in any subject (like Latin or Mathematics) embraces 40 "hours" of work in that subject and is therefore equivalent to 5 recitations a week for two and two-thirds school years, or eight quarters.

A *minor* in any subject similarly embraces 25 "hours" of work in that subject, and is equivalent to 5 recitations a week for one and two-thirds school years, or five quarters.

In selecting minors a student would do well to consult the professor in charge of his major.

The Collegiate studies are divided into the following six groups:

- I. The Group of *Classics*, including the subjects of Latin and Greek.
- II. The Group of *History and Sociology*, including the subjects of History and Government, Economics and Sociology, Archæology and Ethnology.
- III. The Group of *Letters*, including the subjects of Biblical Science, English, German, Library Science, Public Speaking, Romance Languages and Russian.
- IV. The Group of *Mathematics*, including the subjects of Mathematics and Mechanics, as well as Mathematical courses in Astronomy.
- V. The Group of *Philosophy*, including the subjects of Education, Ethics, Philosophy, and Psychology.
- VI. The Group of *Science*, including the subjects of Astronomy, Botany, Chemistry, Geology, Physics, and Zoology. Courses in Mechanics may be counted under Physics.

The degree of Bachelor of Arts is conferred in any one of the above Groups. On the commencement program is printed the name of the Group in which each student has won his degree. The six designations thus are:

- Bachelor of Arts in Classics.
- Bachelor of Arts in History and Sociology.
- Bachelor of Arts in Letters.
- Bachelor of Arts in Mathematics.
- Bachelor of Arts in Philosophy.
- Beachelor of Arts in Science.

For securing the degree of A.B. in any Group it is necessary that a major of 40 hours be obtained in some one of the subjects included in that Group, except in cases mentioned below under (a) and (b). The student must also obtain two minors of 25 hours each. A minor, like a major, is restricted to one subject, except in cases mentioned below, under (a) and (b). The entire combination of a major and two minors must not be chosen from one Group, but one minor may be in the same Group as the major. Both minors may be in the same Group, provided that the major is not in that Group.

A major or minor is ordinarily restricted to one of the subjects in a Group, but the following combinations are allowed:

(a) In the Group of Classics, Greek and Latin may be combined in any proportions for a major, or for a minor.

In the Group of History and Sociology any of the subjects may be combined, in any proportions, for a major, or for a minor. This is also allowed in the Group of Philosophy.

(b) In the Group of Science a combination may be made of Botany, Geology and Zoology, in any proportions, for a major or a minor.

Similarly, mathematical courses in Astronomy may be counted as parts of a major or minor in Mathematics; courses in Mechanics may be counted in Physics or Mathematics.

A major and two minors constitute half the collegiate course. The other half of the course is likewise wholly elective, except that the following studies—if not already obtained as parts of a major or minor—must be taken.

Mathematics—Courses 1, 3 and 4. These are in Plane Trigonometry and College Algebra. Mathematical substitutes for Courses 3 and 4 may be allowed by the Professor of Pure Mathematics. The total requirement is 12 hours.

English—15 hours, 6 of which must be in Composition.

A Modern Language—15 hours.

A Natural Science—15 hours.

Economics—5 hours.

No student can receive a Bachelor's degree, or any higher degree, unless he has been in residence in the College of Liberal Arts not less than thirty-six weeks, and has earned in it at least forty-five hours of credit.

Candidates for non-honorary degrees are required to be present at the service at which the Baccalaureate sermon is preached, and also on Commencement evening. On each occasion academic costume (cap and gown) must be worn. Applications for excuse from these exercises will be considered by the Faculty if presented before May 20. All University fees must be settled by each candidate before his diploma is issued to him.

When a student is excused from attendance upon the exercises of Commencement evening, the usual refund on the fee for diploma and hood will not be made.

Courses of Study

In the following conspectus of the courses of study the letters F, So, J and S are used to denote Freshman, Sophomore, Junior and Senior, respectively; a Roman numeral following one of these letters denotes the number of the quarter in which the course is taught.

Archaeology and Ethnology

The subjects offered in this department are intended to cover two kindred fields of social evolution. The first is a study of origins. It comprises a systematic inquiry into the growth of institutions, and the slow steady progress in the arts of life as revealed through archaic evidences. The second includes a study of those physical and mental characteristics which determine differences in races and nations. Comparisons are made among masses of men living under radically different geographical conditions and developing radically different characteristics. The work of the first year is devoted especially to the study of the human race as a whole. The work of the second year is more specific, and centers on the study of primitive American institutions in comparison with those of the Old World.

1. Primitive Man: this course aims to interpret the culture of man as he appears on the horizon of ancient history, living on the lower culture levels and fighting for existence with the forces of nature. It deals especially with his physical characteristics, his rude language, and his means of defense. 3 hours.....J I
2. Primitive Arts: this course deals with the simple arts of life of early man, his habitations, his habiliments and personal ornamentation, his primitive occupations and industries. 3 hours.....J II
3. Primitive Science: in this course the circle of early sciences is examined, and followed from their simple beginnings up into the higher civilizations. 3 hours.....J III
4. American Aborigines: this course deals with aboriginal life in the New World generally, the spontaneous growth of social institutions amid unique physical environments. 3 hoursS I
5. Primitive Religions: this course is devoted chiefly to the study of early religions. The conceptions of the spirit

- world by races differing greatly in culture and habitat are compared with one another. 3 hours.....S II
6. Primitive Conditions Compared: in this course the conditions of primitive man in the New World are balanced with those in the Old, and results of those conditions are noted in comparison of races with races. 3 hours....S III

Astronomy

The courses offered in the subject of Astronomy are chiefly mathematical in their nature, but Course 1 may be taken by students whose mathematical attainments do not extend beyond Plane Geometry. A knowledge of Solid Geometry will, however, be very helpful for this course. Plane Trigonometry is a prerequisite for Courses 2 and 3 in Advanced Descriptive Astronomy; the more a student knows of mathematics and physics, the more satisfactory these courses will be to him.

Courses 1, 7, 10, 13 and 15 involve observations on many nights.

It is customary to have students do original work whenever it is possible; this is duly published in astronomical journals. Such phenomena as occultations, eclipses, planetary transits and meteoric displays may be observed by students pursuing any of the courses. The work done in connection with Courses 5, 7, 15, 16, 17 and 18 is of sufficient accuracy and utility to be a welcome addition to astronomical knowledge.

The excellent material facilities available for the students in astronomy are set forth on pages 90-91. Beginners are expected to practice with the instruments in the students' observatory and with the subsidiary instruments of the main observatory, before they are allowed to use the twenty-inch equatorial refractor. Very few undergraduate students become sufficiently proficient to employ this instrument for original research, but those pursuing graduate courses may make observations with it throughout the calendar year.

Courses 4-18 may be taken as graduate work by those who have not previously had them or their equivalents. Further graduate instruction, leading to the degree of Ph.D., is given in the domain of practical instrumental astronomy, and the determination of the orbits of planets, comets and double stars.

A student who wishes to make Astronomy a major or minor is permitted to count—as part of his work—courses in Advanced Plane and Spherical Trigonometry, and Analytic Mechanics, since these courses are given largely because of their applications to Astronomy.

1. Elements of Descriptive Astronomy: Howe's Elements, or an equivalent. This course is prerequisite to all the others in Astronomy. 3 hours.....So I
2. Advanced Descriptive Astronomy: Young's Manual of Astronomy is used as a text-book. 5 hours.....So II
3. Advanced Descriptive Astronomy, continued: the text-book used in Course 2 is completed. 5 hours.....So III
4. Elementary Mathematical Astronomy: Barlow & Bryan's work is the basis of instruction. Plane Analytic Geometry is prerequisite. 5 hours.....J I
5. Astronomical Phenomena: simple problems, occultations, eclipses, and other phenomena; use of the Nautical Almanac. Spherical Trigonometry is prerequisite. 5 hours...J II
6. Method of Least Squares: an elementary treatment of the subject, with applications to astronomical problems. Integral Calculus is prerequisite. 5 hours.....J III
7. Elementary Practical Astronomy: use of the solar transit, sextant, meridian transit, equatorial, and filar micrometer. 5 hours.....S I
8. History of Astronomy: the growth of astronomical science from the earliest ages; essays are written upon special themes. 5 hours.....S II
9. Astrophysics: a brief study of methods and results in this branch of inquiry. 5 hours.....S III
10. Geodetic Astronomy: determination of time, latitude and azimuth by astronomical observations. 5 hours.....S I
11. Geodesy; precise triangulation, leveling, spherical and spheroidal geodesy, geodetic co-ordinates and projections, figure of the earth. 5 hours.....S II
12. Nautical Astronomy: plane sailing, middle latitude sailing, latitude, longitude, and time at sea. 5 hours.....S III

13. Time-Determination: approximate and refined methods of determining clock-errors; standard time. 5 hours.....S I
14. Instrumental Errors: a special study of various errors of specific instruments. 5 hours.....S II
15. The Equatorial: uses of the instrument and of the filar position micrometer. 5 hours.....S III
16. Elliptic Orbits: elementary theory of the orbits of planets and double stars; computation of an ephemeris of an asteroid. 5 hours.....S I
17. Parabolic Orbits: their determination from three complete observations. 5 hours.....S II
18. Orbit Computations: computation of a preliminary orbit from three observations, without assumption as to the eccentricity. 5 hours.....S III

Biblical Science and Religion

The courses in this department are grouped in three divisions. The first twelve are in Biblical Literature and History in English. The next three are in the Greek New Testament. The next three are in the Hebrew Old Testament. Courses 19-21 are in English.

The courses in Biblical Literature and History contemplate the study of the English Bible, and are for general students, as well as for those intending special Biblical work. The latter are advised, however, to take them as early in their course as possible.

The courses in New Testament Greek afford an opportunity to the Classical Greek student to make a first-hand study of the New Testament.

The courses in Hebrew are intended to introduce students, who intend to become religious teachers, to the Hebrew which is commonly expected of them. They also furnish a good introduction for persons desiring an acquaintance with the elements of Semitic languages. The courses in Religion and the Evidences of Christianity are designed to give a general and a special survey of these fields.

Courses 10-12 are valid as History for major or minor.

1. The Lineage of the English Bible: lectures with the use of Smyth's "How We Got Our Bible," and Moulton's Modern Reader's Bible. 2 hours. Prerequisite to other courses. Will be repeated during the second and third quarters..F I
2. Course 1, continued: lectures, with the use of Smyth's "The Old Documents and the New Bible." Also Moulton again. 2 hours. Will be repeated during the third quarter...F II
3. Courses 1 and 2, continued: lectures and the use of Smyth's "How God Inspired the Bible." Also Moulton again. 2 hoursF III
4. The Life of Jesus: text-books, Stevens and Burton's "Harmony of the Gospels," with Burton and Matthews' "Constructive Studies in the Life of Christ." 3 hours.....So I
5. Course 4, continued. 3 hours.....So II
6. Course 5, continued. 3 hours.....So III
7. The Apostolic Age: text-book, Gilbert's "Christianity in the Apostolic Age," together with the constant use of the New Testament in the American Standard Revision and other forms. Courses 4-6 are prerequisite. 2 hours.....J I
8. Course 7, continued. 2 hours.....J II
9. Course 8, continued. 2 hours.....J III
10-11-12. Courses in Kent's Historical Bible. 3 hours each quarterJ or S I, II, III
13. Mark and I Peter: critical translation and interpretation; study of the peculiarities of Hellenistic Greek, and the effect of Hebrew religious thought upon it; special investigation of the message and thought of Peter. Two years' study of Greek prerequisite. 3 hours.....J I
14. Matthew and Luke: rapid translation and critical interpretation; comparative study of the structure, peculiarities and aims of the three Synoptic Gospels, with a special view to laying the foundations for the historical study of the life and teachings of Jesus. 3 hours.....J II
15. The Gospel and First Epistle of John: translation, interpretation, analysis and investigation of the questions of date

- and authorship; special study of the point of view and teachings of John. Courses 13 and 14 are prerequisite. 3 hoursJ III
16. Elementary Hebrew: Harper's "Hebrew Method and Manual," and "Elements of Hebrew"; linguistic study of Gen. i-iii. 3 hours.....J or S I
17. Course 16, continued: linguistic study of Gen. i-viii. 3 hours.....J or S II
18. Historical Hebrew: portions of the principal Old Testament books. Harper's "Elements of Syntax." Textual criticism by comparison with the Septuagint. Attention is paid to the literary style of the book, its social, philosophical and religious views and to questions of authorship. Courses 16 and 17 are prerequisite. 3 hours.....J or S III
19. History of Religion: the aim of this course is to make a brief study of the chief religions of the world. Lectures and reading. 2 hours.....J or S I
20. Course 19, continued. 2 hours.....J or S II
21. Evidences of Christianity: the purpose of this course is to test the merits of the peculiar claims of the Christian religion. Lectures and reading. 2 hours.....J or S III

Botany

The following courses in Botany presuppose the completion of such elementary courses in this subject as are usually given in the best high schools. A student who has not taken this prerequisite work, but can show by examination or otherwise his fitness to take up the advanced work, will be permitted to attempt it. These elementary courses aim to make clear the general scope of the subject-matter, and to teach its subdivisions and relations to the kindred sciences of Physics and Chemistry. Thus they prepare the student for higher and more specialized work in Botany, which will have a direct bearing upon scientific or professional life. Laboratory fees are charged for these courses.

1. General Botany: the work begins with the simplest forms, working up to the more specialized plants. The work of

the first and second terms deals with the morphology, physiology and structure, while the third takes up the general geography and ecology. These courses include laboratory work, as well as text-book, in the ratio of 3 to 2. 5 hours.....F or So I

2. General Botany, continued. 5 hours.....F or So II
3. Course 2, continued. 5 hours.....F or So III
4. Histology: this course deals with the tissues of the plant, their location and functions, physiologically considered. 5 hours.....So or J I
5. Ecological Botany: a study of the structure and development of the organs of plants, with reference to their functions. 3 hours.....So or J II
6. Physiological Botany: a detailed study of the principal phenomena of nutrition, respiration, growth, irritability, and reproduction in plants. 5 hours.....So or J III
7. Fungi: their special morphology, physiology and reproduction taken up and carefully worked out from the plants themselves, from mounted specimens and slides. Courses 1, 2 and 3 are prerequisite. 3 hours.....S I
8. General Bacteriology: relation of bacteria to putrefaction, fermentation and disease: contamination of water and food. 3 hours.....S II
9. Advanced Botany: a comparative study of the structure, functions and relationships of families of plants. Courses 1, 2 and 3 are prerequisite. 3 hours.....S III
10. Plant Geography: this is a study of the distribution of plants over the earth's surface, and a search after the causes of different flora, their peculiar locations and limitations. Text, Schimper's "Plant Geography." 3 or 5 hours.
11. Nature Study: See the same course, Zoology 10.
12. Economic Botany: a study of all plant products of economic value. 5 hours.

All courses in Botany include laboratory work.

Chemistry

Many students who enter college without preparation in Chemistry, desire to take up the study of this subject. For such students, Courses 1, 2 and 3 have been arranged. These courses cover elementary Chemistry, and are preparatory to the other courses offered.

Students who have such a knowledge of Chemistry as may be secured in the ordinary high school during a year's study, may commence their college work with Course 4. This course is divided into two parts. Two hours per week are devoted to a study of General Chemistry, including its laws and theories, the elements and their compounds, and the application of Chemistry to the industrial world. Three hours a week are given to qualitative analysis. This portion of the work is strictly laboratory work, and deals with the methods of analysis of complex mixtures. Course 4 is continued into Courses 5 and 6, except that, in Course 6, quantitative analysis takes the place of the qualitative. The three courses together give a year's work in Analytical Chemistry, and also cover the field of General Chemistry.

Courses 7 and 8 consist of a study of the compounds of carbon and are taught by lectures, recitations and laboratory work. The laboratory work consists of problems in the making of organic compounds. These courses are exceedingly valuable from both the chemical and the educational standpoints, and afford training that is equaled by that of few other college courses. Course 9 is a course in proximate organic analysis, and, with Courses 7 and 8, makes a year's work in Organic Chemistry.

The courses following Course 10 are simply representative of the work that may be offered, and will be varied as the needs or desires of the students may require. Not all of these courses will be taught in any one year. Such as are most desired by the students will be given.

The department is very anxious to encourage original research and special opportunities will be given any one qualified to do advanced work.

The laboratory fee for the combined Courses 1, 2 and 3, is \$4.00. For each of the courses numbered 4-11, the fee is \$5.00. For courses 13 and 14, the fee is \$2.00 each. The fees for courses higher than these must be arranged with the professor.

1. General Chemistry: recitations and laboratory work in Elementary Chemistry. This course is designed for students who have had no Chemistry in their preparatory course. 5 hours.....F I
2. General Chemistry: a continuation of Course 1. 5 hours..F II
3. General Chemistry: a continuation of course 2. 5 hours..F III
4. Qualitative Analysis: a laboratory course in the analysis of inorganic mixtures. Two hours a week will be devoted to the study of advanced General Chemistry. 5 hours....F I
5. Qualitative Analysis: a continuation of Course 4. 5 hours.F II
6. Quantitative Analysis: a laboratory course in elementary quantitative analysis which offers practice in volumetric and gravimetric determinations. Course 4 is prerequisite. 5 hours.....F III
7. Organic Chemistry: a study of the compounds of carbon, especially the aliphatic compounds. Lectures, recitations and laboratory work. 5 hours.....So or J I
8. Organic Chemistry: a continuation of Course 7. This term's work, however, deals with the aromatic compounds. 5 hoursSo or J II
9. Organic Analysis: a course in the qualitative and quantitative determination of organic compounds. At the option of the class, the course will be a study of the alkaloids, the fats and oils, plant analysis or physiological analysis. 5 hours.....So or J III
10. Quantitative Analysis: a laboratory course covering the commercial methods of analysis of ores, coal, oil, gases, cement and water. Course 6 is prerequisite. 5 hours....So or J I
11. Quantitative Analysis: a laboratory course in organic analysis covering the analysis of foods and the detection and estimation of adulterants. Course 6 is prerequisite. 5 hours.....So or J II
12. Physiological Chemistry: a study of foods and their digestion, the different tissues of the body and the chemical changes in the life processes of the body. Course 7 and also a knowledge of physiology are prerequisite. 5 hours.....So or J III

- ✕ 13. Blow-pipe Analysis and Determinative Mineralogy: this course is designed to give instruction and practice in the methods of determining minerals by the use of the blow-pipe. Course 4 is prerequisite. 2 hours.....F or So II
- ✕ 14. Blow-pipe Analysis and Determinative Mineralogy: a continuation of Course 13. 2 hours.....F or So III
- ✕ 15. Industrial Chemistry: a study of the chemistry of various manufacturing processes. 2 hours.....F or So II
- ✕ 16. Industrial Chemistry: a continuation of Course 15. 2 hours.....F or So III
- ✕ 17. Physical Chemistry: lectures and recitations. 3 hours....
.....J or S I
- ✕ 18. Physical Chemistry: a study of the Phase rule. 3 hours.
.....J or S II
- ✕ 19. Physical Chemistry: a study of Radioactivity. 3 hours.
.....J or S III
- ✕ 20. Original Research in Organic or Quantitative Chemistry. 5 hours.....J or S I
- ✕ 21. Course 20, continued. 5 hours.....J or S II
- ✕ 22. Course 21, continued. 5 hours.....J or S III
- ✕ 23. Stoichiometry: a course in chemical arithmetic which covers the various kinds of chemical computations. It is largely a problem course and includes practice in the use of the slide-rule. 2 hours.....III

Economics and Sociology

Economics is the science of which business is the art. It investigates the laws of trade, the principles of industrial evolution.

It deals with such subjects as the production and distribution of wealth, money, banking, capital, monopolies, trusts, trades unions, factory acts, strikes, arbitration, co-operation, profit-sharing, tariffs, taxation, municipal ownership and socialism.

The following courses are intended to give the student an insight into the economic organization of society and an appreciation of the economic problems of the present day. Students who intend to become lawyers or business men, or who expect to take an active part in political life, will find these courses especially useful.

- X 1. Introduction to Economics: consumption, production, distribution, money, banking, tariff, land, capitalism, monopoly, wages, socialism. This course is prerequisite to all the following, except Courses 4, 5, 6, 7 and 8. 5 hours....So I
2. Monopolies and Corporation Problems: cause and classification of monopolies, the economies of modern business organization, corporation finance, competitive and monopoly price, evils and proposed remedies, the franchise problem and municipal monopolies. 3 hours.....So II
3. Money and Credit: standards of value and media of exchange, monetary history of the United States, demand and supply of the precious metals, bimetallism and the gold standard, credit, speculation, financial crises, domestic and foreign exchange, banking theory and practice in our own and other countries, recent plans for the reform of our system. 3 hours.....So III
4. Industrial History of England: economic geography of England, the mediæval village, manors, guilds, markets, serfdom, enclosures, merchant adventurers, industrial revolution, factory legislation, recent industrial evolution. 2 hours.....So or J I
5. Industrial History of the United States: economic geography, land tenure, colonial manufactures, industrial aspect of the Revolution, tariff history, railway building, immigration, expansion of commerce. 2 hours.....So or J II
6. Financial History of the United States: colonial finance, finance of the Revolution, federalist policy, history of the tariff, the United States Banks, panic of 1837, the Civil War, greenbacks, free silver agitation, recent legislation. 2 hours. To be given in 1913 and alternate years.....So or J III
7. Commercial Geography: natural conditions affecting commerce, transportation, sources of raw products, commercial routes, manufactures of various countries, colonial commerce, resources of China, Japan, South America; relation of geography to history and commerce. To be given in 1913 and alternate years. 2 hours.....So or J I
8. History of Commerce: economic geography, economic interpretation of history, commerce of Greeks and Romans, the Crusades, the Italian cities, the Hanseatic League,

- commerce of Portugal, Holland and England, the industrial revolution, free trade, industrial development of the United States. Text-book, Day's "History of Commerce." 2 hours.....So or J II
9. Insurance: history and theory of life insurance, mortality tables, the selection of lives, the choice of companies, forms of policies, how companies are managed and premium rates determined, the reserve, surplus, dividends, investments, accident and health insurance, insurance for the wage earners, relation of the state to insurance. 2 hours.....J or S I
 10. Public Finance: taxation of property in general; of land, incomes, corporations, franchises, customs, excises; stamp taxes, incidence of taxation, reforms in taxation, including a special study of taxation in Colorado. Text-books, Plehn's "Public Finance," Le Rossignol's "Taxation in Colorado." 3 hours.....Jo or S I
 11. Work and Wages: laws of wages, rise and fall of nominal and real wages, factory acts, trades unions, strikes, arbitration, co-operation, profit-sharing, socialism. Text-book, Adams and Sumner. 3 hours.....J or S II
 12. Railway Transportation: general principles and history of transportation by land and water, railways in Europe and America, freight and passenger rates, discrimination, railway commissions, governmental ownership, recent legislation. Text-books, Johnson and Ripley. 3 hours..J or S III
 13. Value and Exchange: an advanced course in the organization of industrial society, the productivity of capital and labor, value, price, demand and supply, speculation, exchange and the mechanism of exchange and international trade. 2 hours.....S I
 14. Distribution: a continuation of Course 13; recent discussion of capital, interest, rent, wages, profits, monopoly gains, taxation; the Austrian school, review of articles by recent American and English economists. 2 hours....S II
 15. History of Economic Theory: ancient and mediæval economic thought, Canonists, Cameralists, Mercantilists, Physiocrats. Adam Smith, Malthus, Ricardo, Mill, the Historical School. Special readings and reports Text-book, Haney. 2 hours.....S III

Sociology is both a science of groups, and a group of sciences. In the latter sense, it includes political science, economics, comparative religion, ethnology and all other studies which have to do with the social life of man. In the former sense, it is the study of man as a gregarious animal who has a natural tendency to form groups or associations of various kinds—political, economic, religious, or merely social.

Social science or Sociology, is, therefore, the study of the facts and laws of human association. The facts are many, but the laws are few, and, in general, but dimly perceived. The student must not expect to find here a complete solution of the problems of human society, but may hope to obtain a broader view of the field of knowledge where his previous studies may appear in their proper setting and perspective.

These courses are, as a rule, open only to students who have taken Course 1 in Economics, and one or more courses in general psychology.

16. Social Research: the methods and spirit of social investigation, inductive studies of social statistics, the dynamics of population, the family, immigration, race problems, medical aspects of sociology, housing, town planning, public recreations, standards of living, poverty, crime, degeneracy, defectives, the liquor problem, vagrancy, industrial accidents and occupational diseases, urban and rural problems, industrial betterment, social aspects of religion and education, methods and results of recent investigations. 3 hours.....J I
17. Principles of Sociology: scope and method of sociology, mob mind, social dynamics, progress and degeneration, causes of social superiority, recent tendencies in sociology. Text-books, Dealey and Carver. 3 hours.....J II
18. State Socialism: economic activities of the state, with special reference to New Zealand; the state as a landlord, taxation of land, state railways, life and fire insurance, old-age pensions, advances to settlers and workers, public debt, the civil service, compulsory arbitration, wages and cost of living, distribution of wealth. Text-book, Le Rosignol and Stewart, "State Socialism in New Zealand," with collateral reading. 2 hours.....So or J II

19. Socialism: economic interpretation of history, socialistic theory of value, evolution of capitalism, political organization of the working classes, inauguration of socialistic production. Text-books, Kirkup's "History of Socialism," and Skelton's "Socialism." 3 hours.....J or S III
20. Applied Sociology: theory of social evolution applied to problems of human betterment, development of latent genius by means of education, social progress. Text-book, Ward. 3 hours. To be given in 1912 and alternate years.....J or S III
21. Charities and Corrections: a study of the causes of poverty and the problems of relief, methods of organized charities; charitable institutions and foundations; care of transients, the sick poor, the aged poor; crime and its causes, penal and corrective institutions; training and work of welfare workers or Social Secretaries; philanthropic work of Denver and vicinity, public baths, lodging houses. 2 hours.J or S I
22. Social Settlements: their origin, purpose and results; institutional churches; the problem of the immigrant and his relation to the industrial, religious and social life of a community. 2 hours.....J or S II
23. Child Welfare: the child in the home; institutional care of children, cottage and congregate systems; feeble-minded, backward, truant, delinquent and dependent children; juvenile court, probation; child hygiene, infant mortality, medical inspection of schools; playgrounds, industrial education; child labor; boys' clubs, George Junior Republic, boy scouts and similar organizations. 2 hours..J or S III
24. Oriental Sociology: a study of social conditions and changes in China and Japan.

Education

To secure the best results in this department, it is imperative to keep the theoretical in close touch with practical conditions. To this end, the department has made a thorough investigation of the practical workings of the public schools of Denver and similar cities.

Inasmuch as Education is not an unmixed science, but has its foundation in other sciences, it requires an acquaintance with the history of human thought, with the principles of psychology, ethics and philosophy, to secure the best comprehension of the methods and results of modern pedagogy, and of the ultimate ends of education. It is advisable that some of these courses accompany the work in education.

The following courses are given each year. Courses 5, 8 and 9 are open only to students who have had previous preparation in either psychology or pedagogy:

1. Child Study: Tanner's "The Child." This course is supplementary to the courses in systematic and applied psychology. It aims to present the facts of childhood and the nature and development of early soul-life, so far as they have been scientifically determined. It seeks to awaken a proper attitude of mind for observation and experimentation, and to furnish a basis for testing theories concerning the child's mind. 3 hours.....F or So III
2. History of Education: Davidson's "History of Education." This course traces the formal development of education, and makes clear its connection with civilization and religion. From time to time individual students are called upon to make special research into the lives and characters of representatives in education, and to report their results in class. In the latter part of the course, extensive use is made of Munroe's "Educational Ideal," and extracts from the chief works to which he refers are read and discussed. 3 hours.....So or J I
3. Modern Methods and their Psychological Foundation: this is a special and practical study of late methods of teaching the various branches, their relation to the development of the mind, and the selection of proper material. With our vast accumulation of facts and details in all the different sciences, the fundamental question is the selection of material suitable to the development of the child. Especially is this true of science teaching in the grades, where the accumulation and sifting of Nature Study material has been a leading pedagogical problem. This course will familiarize the student with the best results of these investigations. 3 hours.....So or J II

4. Application of Psychology and Evolution to Education: Spencer's "Education," with additional reading and essays. This course aims to give the scientific phase of education, and to view it from the standpoint of biology and the ends of evolution. The class studies the plasticity and development of the child in relation to his environment, and considers the educational value of different lines of knowledge and the end to be desired. 3 hours.
.....So or J III
5. Theories and Principles of Education: Henderson's "Principles of Education" is used, with reports from other writers. 5 hours.....J or S II
6. Methods of Teaching and Management: Chancellor's "Class Teaching and Management." This course must be taken by all applicants for Practice Teaching. 3 hours..J or S I

English

The course of study in English has the following objects: It aims to give a general view of English literature, from the earliest period to the present; to furnish principles of criticism for prose and verse; to promote readiness and facility in expression; to give those specializing in English, and to others who desire it, practical instruction in the history and development of the English language.

Courses 1 and 16 are required of all students whose major subject is English. Fifteen hours of English are required for graduation; these must all be taken in the department of English. Certain courses in Greek, History, Latin and Public Speaking may, if approved by this department, be counted toward a major in English; but the total number of hours thus taken must not exceed ten.

1. Outline Sketch of English Literature. 2 hours.....F I
Open to all students.
- X 2. Spenser. 2 hours.....F II
Open to all students.
- X 3. Milton and His Age. 2 hours.....F III
Open to all students.

4. Old English Literature. 2 hours.....F I
Open to all students.
5. The Flourishing of Romance and Chaucer. 2 hours.....F II
Open to all students.
6. The Age of Elizabeth. 2 hours.....F III
Open to all students.
7. The Rise of the Drama. 4 hours.....So I
Open to all except Freshmen.
8. Shakespeare: Comedies and Historical Plays. 4 hours..So II
Open to all except Freshmen.
9. Course 8, continued. 4 hours.....So III
10. Anglo-Saxon. 2 hours.....So I
11. Anglo-Saxon, continued. 2 hours.....So II
12. The History of the English Language. 2 hours.....So III
Open to all who have had Anglo-Saxon.
13. Shakespeare: Tragedies. 4 hours.....J I
Open to all except Freshmen.
14. Course 13, continued. 4 hours.....J II
Open to all except Freshmen.
15. Course 14, continued. 4 hours.....J III
Open to all except Freshmen.
16. Principles of Criticism. 3 hours.....J I
17. Technique of Verse. 3 hours.....J I
18. The Essayists. 3 hours.....J I
19. The Essayists, continued. 3 hours.....J II
20. The Eighteenth Century. 2 hours.....J II
Open to Juniors, Seniors and Graduates.
21. Carlyle and Ruskin. 2 hours.....J III
Open to Juniors, Seniors and Graduates.
22. The Rise of the Novel. 3 hours.....S II
Open to Juniors, Seniors and Graduates.
23. The Rise of the Novel, continued. 3 hours.....S II
24. The Nineteenth Century. 3 hours.....S III
Open to Juniors, Seniors and Graduates.
25. Tennyson and Browning. 3 hours.....S III
Open to Juniors, Seniors and Graduates.

Students entering in September, 1909, and thereafter, will be required to elect six hours from the courses offered below in composition. These are to be selected in consultation with the teacher.

- 26. Elementary Composition. 3 hours.....F or So I
- 27. Elementary Composition. 3 hours.....F or So II
- 28. Elementary Composition. 3 hours.....F or So III
- 29. Advanced Composition. 3 hours.....J I
- 30. Advanced Composition. 3 hours.....J II
- 31. Advanced Composition. 3 hours.....J III
- 32. Advanced Composition. 3 hours.....S I
- 33. Advanced Composition. 3 hours.....S II
- 34. Advanced Composition. 3 hours.....S III

Courses in Journalism are offered as specified below. Courses 26, 27 and 28 in English are prerequisite to the journalistic courses.

- 35. Newspaper Writing: lectures on the methods and problems of daily and weekly newspapers. Practice in reporting and correspondence. 2 hours.....So I
- 36. Editorial Writing: a study of editorials in the leading papers of the past, as well as the present; practice in writing editorials; lectures upon the work of the great editors. 2 hours.....So II
- 37. Magazine Writing: the style, character and quality of the articles in current magazines; the student is required to write special articles. 2 hours.....So III
- 38. The English Bible as Literature: studies in the Old TestamentI
Open to all students.
- 39. Course 38, continued.....II
- 40. Course 39, continued.....III
- 41. The English Bible as Literature; studies in the New TestamentI
Open to all students.
- 42. Course 41, continued.....II
- 43. Course 42, continued.....III

Ethics

The aim of the instruction in Ethics is to acquaint the student with ethical principles and to make clear their value when brought into living touch with the various phases of life. The text used is Paulsen's "A System of Ethics."

1. "Outlines of a History of the Conceptions of Life and Moral Philosophy." 3 hours.....J or S I
2. "Fundamental Concepts and Questions of Principle." 3 hoursJ or S II
3. "The Doctrine of Virtues and Duties." 3 hours...J or S III

Geology

1. General Geology, Dynamical and Structural: in this course Chamberlain and Salisbury's College Geology is used as a text, with outside readings from other standard authors, geological reports, and papers. A knowledge of a large number of minerals is also gained. 5 hours. So or J I
2. Historical Geology or Biological Geology: a study of post-archæan rocks and the fossil life contained in them. This course presents and bears out well the evolutionary theory, which is the basis upon which it is built. 5 hours.So or J II
3. Economic Geology: a study of the mineral resources of the United States in particular, and, to some extent, those of the world. Its subdivisions are: the metal-bearing minerals, the non-metallic products, mineral waters, soils and kindred subjects. 5 hours.....So or J III
4. Physiographic GeologyS I
5. Petrology: this course includes the ordinary rock-making minerals, common minerals of economic value, and rocks in general, thus giving the student a general knowledge of the rocks forming the earth's crust. 4 hours.....S II
6. Paleontology: a discussion of the principles of paleontological geology, and a careful study of the more important groups of fossils. A student desiring Course 4, 5 or 6 should consult with the professor before making out his study card. 4 hours.....S III
7. Mineralogy: a course in this subject is described elsewhere under the head of Chemistry.

German

Two aims are kept in view in the instruction in this department:

First—To give a practical speaking and reading knowledge of German, so that those students who shall pursue a profes-

sional career in language, literature, theology, medicine or science, shall be prepared to read and understand readily such books as would naturally be required in the curriculum of their advanced work. Sight reading and speaking form a part of the work of every class.

Second—To introduce the student to the best German literature, both classic and modern. Classical dramas are studied critically, and the biography of the author is carefully reviewed. In the advanced classes, original papers are prepared by the students on the subject-matter gone over during the quarter, and collateral reading is assigned for original investigation. Works of the best modern authors are chosen, in order to present a picture of the customs, life and spirit of the Germany of today.

Every effort is made to insure clearness, beauty of diction and mastery of English in translation. Goethe said: "He who knows no foreign language, knows not his own." The rendering of a foreign tongue into perfect English requires not only a good knowledge of synonyms, but a mastery of the idioms of the language.

Composition, sight reading, memorizing lyrics and songs, are required throughout all courses.

Recitations are conducted chiefly in German.

Students who have had two years of German in High School may enter Course 4; provided that the work has been completed during the year immediately preceding college entrance; otherwise the applicant, if permitted to enter Course 4, may be asked to discontinue it after a trial of two weeks.

The German Club, open to students who have had two years of German, offers the student opportunity to practice his knowledge of German in conversation.

The following courses will be offered according to the demand:

Courses 1, 2, 3 and 33, 34 and 35 shall not count toward a minor or major.

- ✕ 1. Joynes-Meissner, "German Grammar"; Guerber, "Maerchen und Erzaehlungen." 5 hours.....F I
- ✕ 2. Joynes-Meissner, "German Grammar"; Guerber, "Maerchen und Erzaehlungen." 5 hours.....F II
- ✕ 3. Joynes-Meissner, "German Grammar"; Composition; Reading—Zschokke, Storm, Riehl, Gerstaecker. 5 hours...F III

4. German Composition; Translation from English into German; Advanced Grammar; Reading—Baumbach, Wilbrandt, Paul Heyse, Riehl, Andersen. 5 hours.....F I
5. German Composition; Translation from English into German; Advanced Grammar; Reading—Von Wildenbruch, Freytag, Gerstaecker, Moser, Schücking. 5 hours....F II
6. German Composition; Translation from English into German; Schiller, Freitag, Sudermann. 5 hours.....F III
7. Composition. 1 hour.....So I
8. Goethe: prose. 2 hours.....So I
9. Goethe: poetry. 2 hours.....So I
10. Composition. 1 hour.....So II
11. Schiller: Wallenstein. 4 hours.....So II
12. Composition. 1 hour.....So III
13. Lessing: prose. 2 hours.....So III
14. Lessing: poetry. 2 hours.....So III
15. Composition. 1 hour.....J I
16. Current German Literature. 2 hours.....J I
17. The Novel: study of representative novels by Jean Paul, Goethe, Freytag, Keller, Heyse, Sudermann. 2 hours...J I
18. Composition. 1 hour.....J II
19. Goethe, "Faust," "Faustbuch," 18th Century Fausts. 2 hours.
.....J II
20. The Drama. 2 hours.....J II
21. Composition. 1 hour.....J III
22. The German Epic: studies in "Das Nibelungenlied," "Parzival," "Gudrun." 2 hours.....J III
23. Literaturgeschichte. 2 hours.....J III
24. Behaghel, "Die Deutsche Sprache." 2 hours.....S I
25. Francke: history of German literature. 2 hours.....S I
26. Composition. 1 hour.....S I
27. Old High German. 2 hours.....S II
28. Francke, continued. 2 hours.....S II
29. Composition. 1 hour.....S II

30. Studies in German Comedy: Hans Sachs, Gryphius, Lessing, Freytag. 2 hours.....S III
31. Middle High German. 2 hours.....S III
32. Composition. 1 hour.....S III
33. Scientific German. 2 hours.....I
34. Scientific German, continued. 2 hours.....II
35. Course 34, continued. 2 hours.....III
36. Wagner: Opera Texts. 2 hours.....J or S III

Greek

The aim of the instruction is to acquaint the student with Greek life and literature, as far as is possible in undergraduate study. To this end, the courses are of three kinds:

First—Those in which special stress is laid on intensive study with a view to developing in the student power to do critical work.

Second—Rapid reading courses, intended to give a more general survey of a large field.

Third—Courses affording such general knowledge as will provide an appropriate setting for the literature. Such are Courses 19-24, which require no knowledge of Greek, and are open to students in all departments.

Courses 13, 14, 15, 16, 17, 18 will be omitted in 1912-13.

Greek prose composition, one hour per week each quarter, is required of all students in Courses 2 to 12, inclusive.

Courses 13, 14, 15 in the History Department will be accepted toward a major or minor in Classics.

Courses 22, 23, 24 in Greek will be accepted toward a major or minor in History, under the title "History 37, 38, 39."

1. Beginning Greek: White's "First Greek Book." 5 hours...I
2. Anabasis, Book I. 5 hours.....II
3. Anabasis, Books II, III, IV. 5 hours.....III
4. Lysias, selected orations. History of Greek oratory. 2 hoursI
5. Homer, "Iliad," selections. 3 hours.....I
6. Plato: "Apology" and "Crito"; life and times of Socrates. 2 hoursII
7. Homer: selections from the "Odyssey." 3 hours.....II
8. Demosthenes: "De Corona." 2 hours.....III

9. Course 7, continued. 3 hours.....III
10. History of the Persian War: selections from Herodotus, VII, VIII. 3 hours.....I
11. History of the Persian War, continued: Herodotus, IX. 3 hoursII
12. Aeschylus' "Persae." 3 hours.....III
13. History of the Peloponnesian War: selections from Thucydides. 3 hours.....I
14. History of the Peloponnesian War, continued: selections from Thucydides, and from Xenophon's "Hellenika." 3 hoursII
15. Demosthenes' Opposition to Philip: the orations against Philip from 351 B. C. to 341 B. C. 3 hours.....III
16. Greek Drama: two plays of Euripides. 3 hours.....I
17. Greek Drama, continued: two plays of Sophocles. 3 hours..II
18. Greek Lyric Poetry: selected odes of Pindar. 3 hours....III
19. Homer's Odyssey in English. 3 hours.....I
20. Greek Drama in English. 3 hours.....II
21. Course 20, continued. 3 hours.....III
22. Topography and Monuments of Crete, Troy, Mycenae, Tiryns, Olympia and Delphi. 2 hours.....I
23. Topography and Monuments of Athens. 2 hours.....II
24. History of Greek Sculpture. 2 hours.....III

History and Government

Students are advised to pursue the courses in regular order. In order to be admitted to the more advanced courses in History, students must satisfy the professor that they have had sufficient previous training in History. In each year the courses are continuous, and students who have not taken the work of the first quarter will usually not be admitted to the classes of the second and third quarters.

1. The Dark Ages, 476-1273: the imperial monarchy; the rise of the Church and the Papacy; the barbaric migrations; the formation of feudal Europe; the conflict between the Empire and the Papacy; the Crusades; the growth of commerce. 3 hours.....F I
2. The Renaissance and the Reformation, 1273-1648: the development of national governments; pre-reformation move-

- ments; church councils; influence of Humanism on the Reformation; the Reformation; the counter-reformation; wars of the Reformation. 3 hours.....F II
3. The Development of Modern Europe, 1648-1912: the Thirty Years War; the development of absolutism in France; expansion of the European nations; struggle between England and France for supremacy; movements leading to the Revolution in France, and development of modern nations. 3 hours.....F III
Courses 1, 2 and 3 are prerequisite to all other courses.
 4. English History: development of feudalism and the national organization; struggle for political and economic rights; religious reformation; political revolution; era of national expansion. 3 hours.....So I
 5. American History: colonization and growth of local institutions; union against England; development of nationality and growth of national consciousness. 3 hours..So II
 6. American History: rise of the slavery question; growth of sectionalization; destruction of slavery and triumph of nationality; reconstruction, industrial progress and expansion. 3 hours.....So III
 7. History of the French Revolution; philosophical and political movements before 1789; the revolution; wars of France and career of Napoleon. 3 hours.....So or J I
 8. Modern Europe: a review of the French Revolution and career of Napoleon from a European standpoint; conflict between reaction and revolution; rise of the spirit of nationality. 3 hours.....So or J II
 9. Modern Europe: revolutions of 1830 and 1848; rise of the Second Empire and unification of Italy; foundation of the German Empire; interference of western powers to check Russia's advances; political development of Europe. 2 hours.....So or J III
 10. Political Science: theories of the origin of the state; sovereignty; form of the state; structure of government; province of government. 3 hours.....J or S I
 11. The Government of England: the Crown, the Cabinet and Ministry; House of Commons; permanent civil service; House of Lords; the party system; local government; education; the Church; the courts of law. 2 hours..J or S II

12. The Government of the United States: origin of the constitution; nature and functions of the Federal Government and the American State; relations of the national and state governments; comparison of American and European systems. 2 hours..... J or S III
13. Political History and Governments of Continental Europe: the form of government and political questions and parties of France, Germany, Austria, Italy and Switzerland are studied. Lowell's "Governments and Parties in Continental Europe" is used as text. 2 hours.....J or S II
14. Political History of the United States: the rise of parties; the influence of Hamilton and Jefferson; early tariff legislation; the beginning of nullification; revolution of 1800; the War of 1812, its causes and results; the compromise of 1820; the various elections. 3 hours.....J or S I
15. Political History in the United States concluded: the subjects of tariff and nullification continued, the Compromise of 1832, Wilmot Proviso, squatter sovereignty, the overthrow of slavery, reconstruction, the revolution of 1867. 3 hours.....J or S II
16. Constitutional Law: the powers of Congress, the judiciary, the executive, naturalization, civil rights and political privileges. 3 hours.....J III
17. International Law; sovereignty; belligerency, neutrality, intervention, diplomacy, study of recent cases, especially with reference to the late Spanish Colonies, South Africa and China. 3 hours.....So I
18. The History of Diplomacy: especial emphasis will be laid upon American and European diplomacy. 3 hours..J or S II
19. Colonization: Colonization in ancient, mediæval, and modern times; immigration and colonial trade; contact of races, etc. Keller's "Colonization" as text. 2 hours....J or S III

Latin

The work is arranged mainly in 2 and 3-hour courses. This scheme will enable the student to take, if he so desires, at least two Latin courses at the same time. And if he wishes to make Latin a major, it may be best to do so. He may, for example, take a reading course which meets three days per week, and a lecture course which meets two days per week. It is, moreover,

advantageous to attack the field in this double fashion. Such a plan is strongly urged, if the student wants to get a real appreciation of the field as rapidly as possible.

It is of the greatest importance that, in his preparatory course, the student should have acquired a thorough knowledge of Latin Etymology and Syntax, and that he should have learned vowel quantities well. He should also have attained to a good degree of proficiency in the oral reading of Latin, writing in Latin, and translating into English. The rendering into English must faithfully show the thought of the Latin, and at the same time satisfy the demands of the best English idiom.

Throughout the entire course, thoroughness will be constantly sought; but at the same time, a good quantity must also be read. Nothing, after all, can take the place of reading, if one would get a proper grasp of any literature. As a famous German scholar has said: "*Lesen Sie, lesen Sie viel, lesen Sie alles was Sie koennen:*"—Read, read much, read all you can." And so, it is well not only to read in review what has been covered in the space of several days or even weeks, but also from time to time to read what has not been previously attempted. Only in this varied fashion can one hope to attain that facility in translation which will make Latin a working tool. As the work advances, more and more attention is focused on questions of literary, historical, philosophical and archæological interest and significance. The ultimate aim is to learn, as far as possible, through the medium of the Latin itself, those facts pertaining to the daily life and habits of the Romans, which form the basis of a very great deal of the English language and many of the institutions of modern life.

Courses 19, 20 and 21 in the Latin Department will be accepted toward a major or a minor in History, under the title, "History 40, 41, 42."

Courses 16 and 17 in the Greek Department will be accepted toward a major or a minor in Latin, under the title, "Latin 51 and 52."

I. PRIMARILY FOR UNDERGRADUATES

1. Roman History: Struggle of Rome and Carthage in the Second Punic War; Livy, Book xxi and selections from other books; brief consideration of Livy's sources and historical method. 3 hours.....F I

2. Lyric and Iambic Poetry: Horace, "Odes and Epodes"; Greek influence on Horace. 3 hours.....F II
3. Comedy: Terence, "Andria and Phormio"; brief lectures on the origin and development of Roman Comedy. 3 hours.....F III
4. *Latin Writing, First Course: Translations of English narrative. Throughout the year. 1 hour.
5. Satiric and Epistolary Poetry: Horace, "Satires and Epistles"; brief consideration of the growth of Roman satire. 3 hours.....So I
6. Biography; Political and Religious Institutions of the Germans; Oratory: Tacitus, "Agricola," "Germania" and "Dialogus de Oratoribus." 3 hours.....So II
7. Lyric and Elegiac Poetry: Catullus and other poets, selections. 3 hours.....So III
N. B. Courses 8, 9 and 10 are omitted in 1912-13.
8. General View of Latin Poetry: selections from various authors; brief lectures. 3 hours.....J or S I
9. Course 8 concluded: Reign of Tiberius; Tacitus, "Annals," I and II. 3 hours.....J or S II
10. Reign of Tiberius, continued: Tacitus, "Annals," III-VI. 3 hours.....J or S III
11. *Latin Writing, Second Course: study of more difficult idiom; through the year. May be taken by any student who has had Course 4. Work done by individual conference. 1 hour.
12. Biography: Suetonius; selections from "Lives of the Twelve Cæsars"; lectures. 3 hours.....J or S I
13. Epistolary Literature; Pliny, selected letters. 3 hours.....J or S II
14. Satire; Juvenal: principal poems; lecture notes. 3 hours.....J or S III
15. *Latin Writing, Third Course: through the year. Practice in Latin expression and style; translations and essays; individual conferences. Courses 4 and 11 are presupposed.

*Those who expect to teach Latin should not omit the composition courses.

II. FOR GRADUATES AND UNDERGRADUATES

Courses will be selected to suit needs of classes.

16. Philosophical Prose: Cicero, "Tusculan Disputations"; lectures on Cicero's philosophical tenets. 2 hours.....J or S or Gr I
17. Philosophical Poetry: Lucretius, selections; brief lectures on Greek and Roman Philosophy. 2 hours..J or S or Gr II
18. Comedy: Plautus, two plays; short lectures on Plautus's sources, influence, etc. 2 hours.....J or S or Gr III
19. Private Life of the Romans: lectures and studies. 2 hours.....So or J or S or Gr I
20. Course 19, continued. 2 hours.....So or J or S or Gr II
21. Course 19, concluded. 2 hours.....So or J or S or Gr III
22. Latin Literature: General survey; lectures; readings in the Latin authors, with consultation of modern manuals on the subject. 2 hours.....J or S or Gr I
23. Course 22, continued. 2 hours.....J or S or Gr II
24. Course 22, completed. 2 hours.....J or S or Gr III
25. Latin Grammar: leading essentials of. 2 hours.....J or S or Gr I
26. Topography and Monuments of Ancient Rome. 2 hours.....J or S or Gr II
27. History of Classical Scholarship and Introduction to Textual Criticism: valuable preparation for Seminary work. 2 hours.....J or S or Gr III
28. Greek Influence in Latin Literature: knowledge of Greek desirable, but not required. 2 hours.....J or S or Gr I
29. Course 28, completed. 2 hours.....J or S or Gr II
30. Influence of Latin literature in later literature, e. g., Italian, French, German and English. 2 hours....J or S or Gr I
31. Course 30, completed. 2 hours.....J or S or Gr II
32. Palaeography: brief study. 2 hours.....J or S or Gr III
33. Vergil: "Aeneid," I-VII; rapid reading course; brief lectures and readings in reference books. 3 hours...J or S or Gr I

34. Course 33, continued: "Aeneid," VIII-XII. 3 hours.....J or S or Gr II
35. Course 33, concluded: remaining poems. 3 hours.....J or S or Gr III
36. Livy: readings in the text not done in other courses, lectures and studies. 2 hours.....S or Gr I
37. Course 36, concluded. 2 hours.....S or Gr II
38. Epigraphy: brief introduction. 2 hours.....S or Gr III
39. The Roman Drama: readings in Plautus not done in other courses; lectures. 2 hours.....S or Gr I
40. Course 39, continued: readings in Terence not done in other courses, lectures. 2 hours.....S or Gr II
41. Course 39, concluded: readings in Seneca; lectures. 2 hours.....S or Gr III
42. Teachers' Training Course: lectures on the status of Latin in America today, and methods of teaching the subject in high schools; readings from Cæsar's "Gallic War." 2 hours.....S or Gr I
43. Course 42, continued: with readings from Cicero's orations vs. Catiline. 2 hours.....S or Gr II
44. Course 42, concluded: with readings from Vergil's "Aeneid." 2 hours.....S or Gr III
45. Etymological Studies: Examination of English words derived from Greek and Latin. 1 hour.....I
46. Course 45, continued.....II
47. Course 45, concluded.....III
48. Masterpieces of Latin Literature, in Translation. 2 hours..I
49. Course 48, continued.....II
50. Course 48, concluded.....III
51. Seminary: Juvenal; through the year. 2 hours. Graduates only.

Those desiring Seminary work should notify Dr. A. H. Harrop at least six months in advance, so that they may be advised regarding the preliminary preparation.

Library Science

The object of the instruction in this subject is to show college students how to use a modern library, and also to train in general library work those who may wish to act as assistants

in the college library. These assistants are chosen from those students who have made an excellent record in this course.

The course consists of theoretical and practical work in the following subjects:

- The Library Catalogue.
- The indexes to various classes of knowledge.
- The books of reference.
- The investigation of a subject in a library.
- The charging system.
- The classification and marking of books.
- The preparation of new books for the shelves.
- The care of books.
- Bibliographies and how to make them.

This course is given during the first quarter, and repeated in each of the other two regular quarters. The librarian lectures two hours each week. There is an examination at the end of the course, and two hours of credit are given to those who pass. Freshmen are specially urged to take this work.

Mathematics

In preparation for the required collegiate courses in Mathematics, the student is expected to have had elementary algebra through quadratics, and plane geometry. Upon this work, the pupils in high and other secondary schools usually spend two and a half or three years. A review of algebra during the last year of the high school course is essential to satisfactory work in College Algebra. Students from schools which do not give such a review are required to take a course in advanced algebra, which is given during the first quarter of the Freshman year.

When solid geometry is taught in a high school, it should be taken by those who expect to pursue mathematics beyond the first college year.

In the Sophomore year, Courses 7 and 8 in Analytic Geometry should both be taken in preparation for the Differential and Integral Calculus. The course in advanced plane trigonometry, while not a prerequisite for the courses of the Junior year, will be found very helpful. Students who intend to take any of the work in mathematical astronomy should not omit this course in trigonometry.

The course in Spherical Trigonometry is given especially for the benefit of those who wish to pursue the mathematical side of astronomy, or to become civil engineers.

In the Senior year, several mathematical paths open before the student. He may devote the entire year to the Theory of Equations, or he may take the courses in Differential Equations, Quaternions, and Conic Sections. Should he prefer to study applications of mathematics to astronomy or to mechanics, several courses are open to him, which are detailed on pages 36 and 67.

Course 1 is required of all candidates for graduation, and is prerequisite to most of the other courses. In a major or minor in mathematics, courses in mechanics and mathematical courses in astronomy may be included.

1. Elements of Plane Trigonometry. 5 hours.....F I and III
2. Advanced Algebra: this course is intended for students who have had algebra only in the early part of a high school course; it extends through simultaneous quadratic equations in a text-book on College Algebra. 4 hours.....F I
3. College Algebra: indeterminate equations, proportion, variation, progressions, undetermined coefficients, binomial theorem, logarithms, permutations and combinations, continued fractions, summation of series. 4 hours.....F II
4. College Algebra, continued: determinants, theory of equations, solution of higher equations. 3 hours.....F III
5. Plane Surveying: measurements of distances, heights and angles; determination of the true meridian, areas, public lands, leveling. Field work occupies most of the time. Course 1 is prerequisite. Fee, \$3.00; damages to outfit, extra. 5 hours (omitted in 1912-13).....So I
6. Surveying: Course 5, continued. Fee, \$3.00; damages to outfit, extra. 5 hours (omitted in 1912-13).....So II
7. Elements of Plane Analytic Geometry. 5 hours.....So II
8. Advanced Analytic Geometry: chiefly higher plane curves and solid geometry. 3 hours.....So III
9. Advanced Plane Trigonometry: transformations and developments: trigonometric equations. 5 hours.....So III
10. Course 6, continued. Fee, \$1.00; damages to outfit, extra. 2 hours (omitted in 1912-13).....So III

11. Spherical Trigonometry: elementary principles, with a few applications to solid geometry, geodesy and astronomy. 3 hours.....J I
12. Short Course in Calculus: this course treats of simple processes of differentiation and integration much used in engineering and astronomy. 2 hours.....J I
- + 13. Differential Calculus: differentiation, development of functions, evaluation, maxima and minima, applications to curves. Course 7 is prerequisite. 5 hours.....J I
14. Integral Calculus: elementary forms, methods of reduction, length of curves, areas, volumes. Course 8 is prerequisite. 5 hours.....J II
15. History of Elementary Mathematics: Cajori's work is the basis of instruction. 3 hours.....J II
16. Differential Calculus, continued: partial differentiation, expansion of functions, asymptotes, singular points, curve tracing. 2 hours.....J III
17. Curve Tracing: a detailed study of curves of various useful types. 3 hours.....J III
18. Differential Equations: Murray's. Course 14 is prerequisite. 3 hours.....J III
19. Differential Equations, continued. 5 hours.....S I
20. Quaternions. 3 hours.....S II
21. Salmon's "Conic Sections." 5 hours.....S III
22. Theory of Equations: Burnside and Panton's Treatise, chapters I-IX. Course 11 is prerequisite. 5 hours.....S I
23. Theory of Equations, continued: Burnside and Panton's Treatise, chapters X-XIII. 5 hours.....S II
24. Theory of Equations, concluded: Burnside and Panton's Treatise. 5 hours.....S III
25. Higher Plane Trigonometry: trigonometric equations, curves, complex quantities, series and hyperbolic functions. Course 1 is prerequisite. 3 hours.....II
26. The Slide Rule: the theory and principal uses of the slide rule are taught and many exercises are solved. Course 1 is prerequisite. 1 hour.....II

27. Teachers' Course: methods of teaching mathematics in high schools and colleges are discussed and exemplified. 2 hoursIII
- ✧ 28. Mechanical Drawing. 5 hours.....I
- ✧ 29. Course 28, continued. 5 hours.....II
- ✧ 30. Course 29, continued. 5 hours.....III

Mechanics

- ✧ 1. Elementary Mechanics for Engineers: kinematics, laws of motion, work, power, energy, simple harmonic motion, concurrent forces, friction, parallel forces, couples, conditions of equilibrium, center of mass, moment of inertia. 5 hours.....So II
2. Elementary Mechanics of Fluids; fluid pressure, density and specific gravity, whole pressure, center of pressure, flotation, methods of determining specific gravity, pressure of gases under various conditions, machines involving gaseous pressure. 5 hours.....So III
For Courses 1 and 2, Course 1 of mathematics is prerequisite.
For the three following courses integral calculus is prerequisite.
3. Analytical Mechanics: fundamental concepts, composition and resolution of forces, conditions of equilibrium, centroids, friction, virtual velocities, machines, attraction of a spherical shell, kinematics. 5 hours.....S I
4. Analytical Mechanics, continued: Newton's laws, motion when the force is variable, central forces, constrained motion, impact, energy, moment of inertia, rotation, motion of a system of rigid bodies in space. 5 hours....S II
5. Hydromechanics: equilibrium and pressure of inelastic and elastic fluids, their motion in pipes and open channels; hydrostatic and hydraulic machines. 5 hours.....S III
6. Strength of Materials: elastic properties, stress in beams and their flexure, columns and struts, torsion, spheres and cylinders under uniform pressure, flat plates, hooks, links and springs, arches, foundations and retaining walls, physical properties of building materials. 5 hours....S I

7. Applied Mechanics for Engineers: this course is more advanced than Course 1, integral calculus being used very freely in it. Special attention is given to the theory and practical applications of such important subjects as the moment of inertia, center of gravity, work and energy, friction and impact. The subjects treated are: concurrent forces, parallel forces, center of gravity, couples, non-concurrent forces, moment of inertia, flexible cords, rectilinear motion, curvilinear motion, rotary motion, dynamics of machinery, work and energy, friction and impact. 5 hours.....S II
8. Applied Mechanics for Engineers: a continuation of Course 7. 5 hours.....S III
9. Hydraulics: a theoretical and practical consideration of the elements of hydrostatics and hydrodynamics; the hydraulic turbine is especially considered; see Course 23 under Physics. 2 hours.....S I
10. Hydraulics: Course 9 continued. 2 hours.....S II
11. Hydraulics: Course 10 continued. 2 hours.....S III

Philosophy

The first six courses form a two-year cycle, of which 1, 2 and 3 are repeated every other year, while 4, 5 and 6 take their places the following year. A student may begin with either Course 1 or Course 4. Only those who have had Philosophy or Psychology are admitted to Courses 3, 5 and 6. Courses 1, 2 and 3 will be omitted in the year 1912-13.

1. History of Ancient and Mediæval Philosophy: introductory lectures and study of Lewes' "Biographical History of Philosophy," with reference to Zeller's "Outlines of Greek Philosophy" and Windelband's "History of Philosophy." This is an elementary course, intended primarily for the general student, to give information concerning the history of thought to the time of Bruno, and to point out the influence which philosophical ideas have exerted on civilization. 3 hours.....J or S I
2. History of Modern Philosophy: from Bruno to the culmination of German Philosophy in Hegel, and the subsequent departure and criticism. Study of Weber's "His-

- tory of Philosophy," with readings from Falkenberg's "History of Modern Philosophy," Kulpe's "Introduction to Philosophy," and Jerusalem's Introduction to Philosophy. 3 hours.....J or S II
3. The Philosophy of Kant and his followers: lectures, private readings or essays. This course is designed for those who have gone over the general history of philosophy, and consists chiefly of an examination of Kantian philosophy and its influence on modern thought. Mueller's translation of the "Critique of Pure Reason" is preferred. Students should have Course 1 in philosophy, and Courses 1 and 2 in psychology (or their equivalents) as a preparation for this course. 3 hours.....J or S III
 4. The Theory of Evolution: its history and significance; study of Spencer's "First Principles." This course begins the second year of the two-year cycle, and does not presuppose acquaintance with the history of philosophy. It is open to beginners in the study of philosophy, as well as to those who have taken the previous year. The opening lectures trace the history of the evolutionary theory from its appearance among the ancient Greeks to its foundation by Darwin. The class becomes acquainted with the writings of its chief exponents, Darwin, Spencer, Haeckel, Huxley, Weismann, Bergson and others. Prominence is given to the recent modification of the theory and its relation to sociology, ethics and religion. 3 hours..J or S I
 5. The Theory of Evolution, continued. 3 hours.....J or S II
 6. The Theory of Evolution, continued. 3 hours.....J or S III
 7. Elements of Logic: Hibben's "Deductive and Inductive Logic." 3 hours.....J or S II
 8. Logic, continued. 3 hours.....J or S III

Physics

The work of the department of physics is arranged to meet the needs of all classes of students. For those just entering, with no knowledge of the subject, a course in general physics is offered in the Warren Academy, extending throughout the year. This course or its equivalent is required of all students entering the University and cannot be counted toward university credit.

The department offers instruction for students preparing to teach physics and those who wish to acquire a general knowledge of the subject as a basis for other special courses. There are also courses for students of engineering who want a university training or who wish to pursue a part of their work in the University before entering a technical school.

Courses in mechanical drawing, designing, and descriptive geometry for which credit is counted in mathematics, are offered by this department, and are listed as mathematics 28, 29 and 30.

In September of the present year the Department of Physics will be permanently located in its new quarters in Science Hall, now well under construction. This building is a modern fire-proof structure, especially designed for the Departments of Physics and Chemistry. The Physics Department will occupy the entire first floor and a number of rooms in the basement of this large building.

The laboratory is being equipped with both alternating and direct current power circuits, a motor-generator set, alternating and direct current motors and generators, a rotary converter, rectifiers, transformers, and measuring instruments for the presentation of courses in Applied Electricity and Dynamo-Electric Machinery. The department will be equipped with a shop for apparatus construction, and special rooms for research work have been provided.

All the rooms are being equipped with water, gas and electricity.

The department wishes especially to encourage advanced study and work of precision, and the supply of apparatus for such work is fairly complete.

1. General Physics: mechanics and heat; experimental lectures, recitations and laboratory work; four class periods and one-two hour laboratory period per week. Most of the important laws and phenomena of physics considered in this course are experimentally demonstrated in the lectures. The recitations cover definite text-book assignments. The laboratory work is based upon a carefully selected list of quantitative experiments in the different branches of the subject, using Ames and Bliss' manual as a basis; however, the work is not confined to one text. The student is required to submit a complete and accurate record of the work done, covering a discussion

of theory and results. These reports form the basis of criticism of the laboratory work. Open to those who have had or are taking Plane Trigonometry. 5 hours.

-So I
2. General Physics: electricity and magnetism: a continuation of Course 1. 5 hours.....So II
3. General Physics: sound and light. A continuation of Course 2. 5 hours.....So III
4. Advanced Laboratory Work: this course is a continuation of the laboratory work offered in Courses 1, 2 and 3. Individual assignments will be made to meet the needs of each student. Courses 1, 2 and 3 are prerequisites. 2 hours.....J or S I
5. Advanced Laboratory Work: Course 4, continued. 2 hours.J or S II
6. Advanced Laboratory Work: Course 5, continued. 2 hours.J or S III
7. Theory of Light: lectures, recitations and laboratory practice; three class periods and one two-hour laboratory period per week. Courses 1, 2 and 3 are prerequisites. 4 hours.....J I
8. Electricity and Magnetism: a more advanced course than Course 2, consisting of lectures, recitations and laboratory work; three class periods and one one-hour laboratory period per week. The laboratory exercises are quantitative electrical measurements. The work will be supplemented with problems. Courses 1, 2 and 3 are prerequisites. 4 hours.....J II
9. Theory of Heat: lectures, recitations and laboratory practice; three class periods and one two-hour laboratory period per week. Courses 1, 2 and 3 are prerequisites. 4 hours.....J III
10. Physical Problems: the application of mathematics to physics and the solution of physical problems. Courses 1, 2 and 3 are prerequisites. 1 hour.....J or S I
11. Physical Problems: a continuation of Course 10. 1 hour.J or S II
12. Physical Problems: a continuation of Course 11. 1 hour.J or S III

13. Thermodynamics: lectures and recitations. Courses 1, 2, 3 and 12, and Courses 13 and 14 of Mathematics are prerequisites. 4 hours.....J or S III
14. Electrical Measurements: a laboratory course in electrical testing as related to physics and electrical engineering. Courses 1, 2 and 3 are prerequisites. Parr's Electrical Testing. 2 hours.....J or S I
15. Modern Physical Theories: lectures and recitations. 2 hours.....J or S III
16. Theoretical Electricity and Magnetism: lectures and recitations. Courses 1, 2 and 3, and Mathematics 13 and 14 are prerequisites. Joubert's Electricity and Magnetism. 2 hours.....S I
17. Theoretical Electricity and Magnetism: a continuation of Course 16. 2 hours.....S II
18. Theoretical Electricity and Magnetism: a continuation of Course 17. 2 hours.....S III
19. Physical Manipulation: a series of exercises is arranged to acquaint the student with general physical apparatus and to develop the ability to handle apparatus for lecture demonstrations. Open to advanced students in Physics. 1 hour.....S II
- + 20. Direct Current Machinery: lectures and recitations. The theory and operation of direct current machinery, with special consideration of direct current generators and motors. Open to those who have completed Courses 1, 2 and 3. Elements of Electrical Engineering, Vol. I, by Franklin and Esty. 5 hours.....J I
21. Dynamo Laboratory: The calibration of measuring instruments; the operation and testing of direct current dynamos and motors; incandescent and arc light photometry. Courses 1, 2, 3, and 20 are prerequisites. 3 hours..J II
22. Alternating Currents: lectures and recitations. The theory and underlying principles of both single and polyphase currents will be developed as a basis for alternating current testing. The course will be supplemented with practical problems. This work is a continuation of Course 21. 2 hours.....S III
23. Hydraulics: lectures and recitations. A practical and theoretical consideration of the elements of hydrostatics and

hydrodynamics, which is intended to give the student a thorough understanding of the subject. The development, design and operation of hydraulic turbines will be included, and special attention will be given to the subject in its relation to irrigation. Open to students who have completed Courses 1, 2, and 3. 2 hours.....J or S I

24. Hydraulics: a continuation of Course 23. 2 hours..J or S II

25. Hydraulics: a continuation of Course 24. 2 hours..J or S III

Psychology

Although philosophical and psychological problems are closely related, and the courses are generally united, for the sake of definiteness we present the courses under separate headings. The courses under philosophy and psychology are, in a degree, dependent; yet students may take the full two years in psychology without philosophy.

Courses 2, 4, and 6 are open only to students already acquainted with the elements of psychology.

1. General Introduction to Psychology: Pillsbury's "Elements of Psychology." This course is general, and designed to furnish a comprehension of the chief psychological terms and problems of investigation. The starting point is not fine distinctions between terms, such as consciousness and self-consciousness, but the most common and interesting mental activities of the individual, culminating in definitions and distinctions only after many facts have been comprehended. This course will be given every year. 3 hours.....F I
2. Systematic Psychology: systematic study of James' "Principles of Psychology," with reports by students from recent Psychologies. This course aims to give the student a comprehensive view of psychic life as a whole, and to acquaint him with the various rival theories. It touches the most vital questions of physiological psychology, localization, self-consciousness, relation of the faculties of perception, memory, imagination, etc., also the nature and significance of the emotions, instinct, and will. 5 hours.....J or S I

3. Comparative Psychology: Washburn's "Animal Mind." This covers the important topics in animal psychology and in the development of the child and the race. Questions of instinct and psychic heredity, and the general field common to biology and psychology, will be considered with reference to human psychology. Wundt's "Human and Animal Psychology," Morgan's "Habit and Instinct," Ribot's "Psychology of the Emotions," and Romanes' "Animal Intelligence," furnish the outside reading for this course. 3 hours.....J or S II
4. Experimental Psychology: Witmer's "Analytical Psychology." The course aims chiefly to develop the methods of experimental psychology and to acquaint the student with the work already done. Lectures and reading cover the field of experimentation, with special reference to reflex action, reaction time, influence of attention, and the valuable results on fatigue. 3 hours.....J or S III
5. Physiological Psychology: Donaldson's "Growth of the Brain." In this course, the development of the nervous system and of the sense organs, in their relation to intellectual activity, constitute the central ideas; defects with their corresponding variations; influence of health, food, and external environment upon mental activity; general relation of body and mind. 3 hours.....J or S I
6. Abnormal and Pathological Psychology: lectures, reading, and reports. Illusions, hallucination, dreams, hypnotism, mental science, psychic epidemics, criminals, the deaf and blind; such are some of the topics considered in this course. 3 hours.....J or S II
7. Psychology and Philosophy in Literature: This is a new departure in psychology and philosophy, and has proven to be interesting and profitable. It consists of a series of lectures analyzing the chief productions of the great geniuses from the standpoint of the feelings, sentiments, psychological types of mind, whether symbolical or allegorical or concrete, objective or subjective, spontaneous or rule-made, and finding out the philosophical and ethical system on which the work is based. The following are some of the writers included: Homer, Goethe, Schiller,

Dante, Ibsen, Herder, Shakespeare, Carlyle, Browning, Eliot, Hugo, Emerson, Tolstoi, Nietzsche. 3 hours.....

.....J or S III

8. Social Psychology: this rapidly developing subject, which looks to biology and psychology as the proper avenues to the interpretation of social institutions must be represented in any complete course in psychology. McDougall's "Social Psychology" will be used as a basis for this study. 3 hours.....J or S I
9. Social Psychology, continued. 3 hours.....J or S II
10. Advanced Psychology: here the larger problems of psychology are studied, as presented by the different schools. 5 hours.....J or S III

Public Speaking

The work in Public Speaking consists of the study of the proper uses of the intellect, the imagination, and the feelings, together with the development of the natural tones of voice which reveal them. Separate technical training is given for the development of the voice, and for the establishment of correct habits in the use of the body.

1. Effective Speaking: Arthur Edward Phillips' "Effective Speaking." It is the purpose of this course to discuss effectiveness in respect to the collecting and putting together of material for original speeches and also in respect to delivery. 5 hours.....F or So I
2. Course 1, continued. 5 hours.....F or So II
3. Course 2, continued. In this course speeches from the field of dramatic literature and oratory will be analyzed with reference to the principles discussed in Courses 1 and 2. 3 hours.....F or So III
4. Interpretation of the Printed Page: This course will deal in detail with the problems of the printed page. These problems include grouping, pausing, principality, subordination, transition, atmosphere, variety, melody, thought and emotional values. Special selections will be analyzed, and each student assigned definite lessons for presentation before the class. Students and instructor will pass judgment with the two-fold purpose of giving the mem-

- bers of the class training in criticism, and independence in analysis. 5 hours.....F or So I
5. Course 4, continued. 3 hours.....F or So II
 6. Course 5, continued. 3 hours.....F or So III
 7. Voice and Action in Public Speaking: breathing and vocal gymnastics; voice culture through the imagination; voice training for purity, control, quality and strength. Special attention will be given to the use of the voice in public rendering. Gesture, as here studied, is taken out of the realm of artificiality and formality. By the student's spontaneous responses, gesture is proved to be the natural result of mental and emotional activity. 2 hours.
.....So or J I
 8. Course 7, continued. 2 hours.....So or J II
 9. History of Oratory: Sears' "History of Oratory." The most prominent teachers and exemplars of Oratory, from Pericles to George William Curtis, inclusive, are carefully studied, to learn the characteristics of each. Study of the orations of great orators, with some time given to actual speaking by members of the class. 2 hours.....
.....So or J III
 10. Principles of Vocal Expression and Literary Interpretation: Chamberlain and Clark's "Principles of Vocal Expression and Literary Interpretation." The purpose of this course is to present the fundamental principles of literature as art, so that oral expression may be based on a deep and full appreciation of the spirit of literature. The method pursued is to study a selection that illustrates some literary principle, to discuss that principle, and to analyze the selection carefully, that it may serve as a standard of criticism. Courses 4 and 5 are prerequisite. 2 hours.....S I
 11. Course 10, continued. 2 hours.....S II
 12. How to Teach Reading: Clark's "How to Teach Reading in the Public Schools." This course has a double purpose, first, to assist the teacher to teach reading; second, to help the teacher to improve his own reading. Courses 4 and 5 are prerequisite. 2 hours.....S III

When a student has met satisfactorily the following requirements, he is entitled to a certificate from the Department of Public Speaking:

1. Completion of the work required for the degree of Bachelor of Arts, which must include:
 - Public Speaking—30 hours, including Courses 7 and 9.
 - English—Course 7 and the composition course in argumentation.
 - Psychology—9 hours, including Courses 1 and 7.
 - Philosophy—Course 7.
2. Private instruction during the course of two years with at least one lesson per week during three quarters of each year.
3. One public recital.

Students holding a certificate from the Department of Public Speaking may be admitted to a graduate course leading to the degree of Bachelor of Oratory.

Work for this degree must include work in the departments of English and Public Speaking, together with private instruction in Public Speaking during the course of three quarters.

Romance Languages

FRENCH

1. Chardenal's French Grammar, revised by Brooks. Guerber's *Contes et Legendes*, Vol. 1. 5 hours.....F I
2. Course 1, continued: Halévy's "L'abbé Constantin." 5 hours.
.....F II
3. Course completed: Erckmann-Chatrian's *Mme. Thérèse*. 5 hours.....F III

In the following classes French only is spoken:

4. Review of the French Grammar: Text-book, Claude Auge's "Cours de Grammaire," Laurie's "Mémoires d'un Collegien." 5 hours.....So I
5. French Syntax and Composition, by Vreeland and Koren; Balzac's "Eugénie Grandet." 5 hours.....So II
6. Course 5 continued: Taine's "La Fontaine et ses Fables." 5 hours.....So III

7. French Composition, Koren's Rougemont's Littérature Française. 3 hours.....J I
8. Course 7, continued; Origine de la France contemporaine. 3 hours.....J II
9. French Review Exercises, Marcou's. 3 hours.....J III
10. Composition and Conversation: Leune's Difficult French. 2 hours.....S I
11. Composition and Conversation: Mémoires du Duc de St. Simon. 2 hours.....S II
12. Conversation and Correspondence: Aubert's "Littérature du 18me et 19me Siècle. 2 hours.....S III

ITALIAN

The following courses are offered in Italian. If there is sufficient demand the work will be extended.

1. Elementary Italian: grammar, conversation, reading; Sauer's "Grammar"; Bowen's "Reader." 3 hours.....J I
2. Course 1, continued. 3 hours.....J II
3. Goldoni's Comedies. 3 hours.....J III

SPANISH

1. Olmsted and Gordon's Spanish Grammar, Worman's First Spanish Reader. 5 hours.....F I
2. Spanish Grammar, continued. DeHaan and Morrison's Cuentos Modernos. 5 hours.....F II
3. Spanish Grammar completed. Morrison's Tres Comedias Modernas. 5 hours.....F III
4. Review of Grammar: Text-book, Edgren's Short Spanish Grammar, J. D. M. Ford's Exercises in Spanish Composition, Alarcon's "El Capitan Veneno." 3 hours.....So I
5. Humphrey's Spanish Prose Exercises; Galdo's "Dona Perfecta." 3 hours.....So II
6. Humphrey's Spanish Prose Exercises, continued; Valera's "Pepita Jiménez." 3 hours.....So III
7. Spanish Conversation and Composition: La Condesa de Aulnoy, Memorias de la Corte de Espana; version de la Barella; Remy's Spanish Composition. 2 hours..J or S I
8. Spanish Conversation and Correspondence: Harris' Spanish Correspondence, Bazán's Pascual Lopez. 2 hours..J or S II

9. Spanish Conversation and Correspondence: History of Spain; History of Spanish Literature; Spanish Literature in Spanish America. 2 hours.....J or S III

A Spanish Club was established in 1911-12. The students' enthusiasm for Castilian speech and Spanish literature assures the permanency of this club.

Zoology

Courses 1, 2 and 3 are devoted to Zoology in general. These courses are open to all students. The work consists of lectures, laboratory work and quizzes. Some good text is required also.

1. General Zoology: this course embraces general zoological topics, being intended as a foundation for the more specific work to follow. 5 hours.....F or So I
2. General Zoology: a continuation of Course 1. 5 hours.....
.....F or So II
3. General Zoology, continued: this is an extension of courses 1 and 2. Special attention is given to the development of the nervous system and sense organs, to variation, and to kindred subjects. 5 hours.....F or So III
4. Zoology: comparative anatomy of adult forms; life history and classification of various groups. 3 hours.....J I
5. Histology: study of the elementary tissues, together with the best methods of staining, injecting, imbedding, sectioning and mounting. 5 hours.....J II
6. Elementary Embryology: lectures and laboratory practice dealing with the history of the germ cell and the development of the embryo. 3 hours.....J III
7. Mammalian Anatomy. This course is designed to make clear the general mammalian anatomy. Some very typical animal—as the cat—is taken as the type. The course is one of great value to students looking toward medicine as a profession. 5 hours.....S I
8. Course 7, continued. 5 hours.....S II
9. Zoogeography and Ecology. This course deals specially with the distribution of animals and their relations to their surroundings. It is open to all students having a fair knowledge of Zoology.

10. Rise and Development of General Biology: historical lectures in which the rise and development of General Biology, Zoology and Botany are traced from the earliest works to the present. Especial attention is paid to the fundamental principles and their application to the present systems. Outside readings and quizzes are a part of the work also. Students desiring Courses 7, 8 or 9 must make arrangements with the professor.
11. Nature Study. Every person interested in teaching should not neglect this phase of the college work in science. It aims not only to give the student a wider knowledge of nature in general, but also to teach him how best to present the information to the child. Some good text is studied, supplemented by the use of materials in the laboratory. 5 hours.
12. Physiology and Hygiene. The course is intended to acquaint the student with the results of modern physiological research and its relation to the workings of the human body. Some good text will be used with lectures, quizzes and demonstrations from appropriate materials. 3 or 4 hours.....So I
13. Entomology of Colorado. 5 hours.....S
14. Course 13, continued. 5 hours.....S
15. Economic Zoology.....S

Educational Training for Teachers

It is proposed to prepare students, both in subject-matter and in methods for the most efficient work as teachers. During the session of the 17th General Assembly a law was passed admitting the graduates of the University of Denver to certification without examination on condition that they have thirty hours' credit in practical pedagogy. The courses for which credit will be given must be selected from the following groups of subjects and distributed among at least three of these groups: (Practice teaching is required.)

1. General and Educational Psychology.
2. History of Education.
3. Science and Principles of Education.

4. Practice Teaching and Special Methods.
5. Organization and Management of Schools.
6. Philosophy, Sociology and Anthropology.

Arrangements for Practice Teaching, in conformity with the requirements of the new Board of Examiners, have been made.

The University of Denver is so strategically located that it has immediate knowledge of vacancies over a large area of the West and could easily place many more teachers than it does place each year.

There is such a large demand for young men in other walks of life that it is impossible to supply the demand for men teachers. Throughout the State of Colorado are many young men who have partially completed a college course and consequently are ineligible to many of the positions open to college graduates. These men should come to the University and complete a college course, thus removing an obstacle to their advancement.

A student having received his degree of Bachelor of Arts and having to his credit the educational and psychological subjects required by the law and quoted above and a major and minor in some other subjects will receive a certificate stating the amount and character of work done, in addition to the certificate granted by the state.

Course in Journalism

Instruction in Journalism in connection with the College of Liberal Arts commenced with the opening of the fall term in September, 1909. The three-fold object of this work is: First, to afford those desiring to combine a course in liberal education with such practical knowledge as may enable them, upon receiving their Bachelor of Arts degree, to enter the journalistic field with a reasonable amount of preparation and a just sense of the responsibility of their profession. Second, to show the college student who, as minister, teacher, physician, lawyer, or business man, may in after life assume a more or less public position, how to reach the people understandingly through the press. Third, to furnish active newspaper men, who are especially devoted to their life work, an opportunity to make public their ideas of newspaper work.

English: courses 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, and 37, which give 33 hours of credit.

Modern Languages: 30 hours of credit; however, four years of high school work in modern languages will release a student from this requirement. A proportionate allowance will be made for less than four years of such work.

History: courses 1, 2, 3, 4, 5, 13, 14, and 15, which give 24 hours of credit.

Economics: courses 1, 2 and 3, which give 11 hours of credit.

Geology: course 3, which counts as 5 credit hours.

Political Science: courses 14 and 15 of History; these give 6 hours of credit.

Psychology: courses 1, 2 and 6, which give 11 hours of credit.

Attendance and Examinations

Students are expected to be present at each recitation, and to take the final examination in each subject pursued. Each group of two absences from a given class in a particular quarter adds one question to the list for the regular examination at the close of the quarter, unless the number of absences exceeds double the number of hours of credit which the study regularly brings; in that case the student's registration in the class is cancelled, or else he may obtain credit for the quarter's work by fulfilling special conditions imposed by the teacher.

Chapel exercises are held on each school day except Wednesday; all students are required to be present, unless duly excused. On certain days, however, the regular exercises give way to special ones which embrace the presentation of matters of general school interest, oratorical or elocutionary efforts on the part of students, addresses from distinguished visitors and the Faculty, and the cultivation of a healthy college spirit.

Concerning Engineering

The first essential to becoming an engineer is thorough training in Mathematics, Physics, Chemistry, Mechanics, and Mechanical Drawing. These subjects are fundamental to successful work and must be thoroughly mastered. Recognizing this fact, the first and second years of the four-year courses leading to the various en-

engineering degrees are designed to give thorough preparation in these subjects. For the Freshman year, the studies are usually the same for all of the different branches of engineering, and a student need not decide which branch he will follow until the end of this year. Specialization commences in the Sophomore year, but even in this year the greater part of the studies are the same.

The University of Denver is at present prepared to offer only the Freshman and Sophomore years of engineering. These courses have been prepared after careful study of the work given in the best engineering schools and are fully the equivalent of the courses that they offer. Students who have completed this work with us have received full credit in engineering schools and have made fine records in such schools.

Freshman Year

| | First Quarter | Second Quarter | Third Quarter |
|------------------------------|------------------------------|---|--|
| Mathematics | Trigonometry, 5 hrs. | College Alg., 4 hrs. Anal. Geom., 5 hrs. | College Alg., 3 hrs. |
| Chemistry | Qualitative Analysis, 5 hrs. | Qualitative Analysis, 5 hrs. | Quantitative Analysis, 5 hrs. |
| Drawing and Descriptive Geom | Mechanical Drawing, 5 hrs. | Mechanical Drawing, 2 hrs. | Mechanical Drawing, 2 hrs. Descriptive Geometry, 5 hrs. |
| English | Composition, 3 hrs. | Composition, 3 hrs. | Composition, 3 hrs. |

Some degree of specialization for the different engineering courses occurs during the Sophomore year. From the studies listed on the following page the student will select the eighteen hours of work most closely connected with his proposed life work. The Professors will be glad to assist in the making of this selection.

Sophomore Year

| | First Quarter | Second Quarter | Third Quarter |
|-------------|---|--|---|
| Mathematics | Differential Calculus, 5 hrs. | Integral Calculus, 5 hrs. | Integral Calculus, 2 hrs. |
| Mechanics | | Elementary Mechanics, 5 hrs. | Elementary Mechanics, 5 hrs. |
| Surveying | Plane Surveying, 5 hrs. | Surveying, 5 hrs. | Surveying, 2 hrs. |
| Physics | Mechanics and Heat, 5 hrs. | Electricity and Mag., 5 hrs. | Sound and Light, 5 hrs. |
| Chemistry | Quantitative Analysis, 5 hrs. Organic Chem., 3 or 5 hrs. | Quantitative Analysis, 5 hrs. Organic Chem., 5 hrs. Industrial Chemistry, 2 hrs. Mineralogy, 2 hrs. | Quantitative Analysis, 5 hrs. Organic Analysis, 5 hrs. Industrial Chemistry, 2 hrs. Mineralogy, 2 hrs. |
| Geology | Gen. Geol., 5 hrs. | Petrology, 4 hrs. | Economic Geology, 5 hrs. |

Junior Year

A third year's work is offered in Civil, Electrical and Chemical Engineering. The schedule of studies in these courses may be arranged by consultation with the Professors.

Teachers' College

Fourteen years ago, teachers' classes were begun by Dr. Phillips, with three students. During the past few years, many teachers and principals in Denver have been students in the Teachers' College. These classes meet in the Denver Y. M. C. A. building, on each Saturday of the school year. They are intended for teachers, professional men and women, and special students who are unable to attend the regular classes in the College of Liberal Arts, but who desire to specialize in some particular line, or to complete the college course. Special opportunities are offered to teachers for professional training, for development in the subjects which they are required to teach, and for collegiate instruction in other branches.

The only qualification for entering any class is ability to do the work of that class.

No course for a half-year embraces more work than a corresponding four-hour course in the College of Liberal Arts, and each class recites seventy minutes each week, as provided in the schedule. No student may earn more than eight hours of college credits in a half-year, without permission of the Faculty.

At the close of each half of the college year, an examination is held in each study. Any student who does not take the examination in a given study at the scheduled time may obtain a special examination without charge, if the absence was caused by illness; otherwise, a special examination costs two dollars. No collegiate credit is given without examination.

Each teacher makes reports regularly of all examinations in his classes to the Dean of the College of Liberal Arts.

The fee for attendance upon one class only is eight dollars per half-year; for each additional study, the charge is five dollars a half-year; fees are payable in advance to the Secretary of the Teachers' College.

Classes of fewer than six members may be formed by special arrangement.

Specific inquiries about this work may be addressed to Dr. D. E. Phillips, University Park, Colorado.

Summer School

Since 1901 a summer session of six weeks has been held in University Hall, at University Park. Courses corresponding to those given during the regular college year are offered.

It is the intention of the University authorities to develop the summer session, increasing the number of instructors and of courses offered as fast as the patronage justifies.

During the summer of 1912, courses will be offered in the following subjects: Astronomy, Botany, Chemistry, Elementary Economics, Education, English Language

and Literature, Ethics, Geology, German, History and Political Science, Mathematics, Mechanical Drawing, Philosophy, Physics, Psychology and Zoology.

This work will be conducted, in the main, by members of the regular staff of collegiate professors. To suit the needs of some students, a few studies in the preparatory department are taught, when there is sufficient call for them. As soon as possible, the summer session will be lengthened to twelve weeks, so that the full collegiate year will embrace forty-eight weeks. A special bulletin of the Summer School is issued each year.

Graduate Studies

Graduates of the College of Liberal Arts of the University of Denver, or of similar institutions of approved rank, may be admitted to graduate courses leading to the degrees of Master of Arts and Doctor of Philosophy. These degrees are not conferred for work done *in absentia*. Before any work is definitely prescribed, the applicant must pay a matriculation fee of five dollars unless he has previously been a student in the College of Liberal Arts.

For the Master's degree, a year's work is required. It may consist of a major comprising two-thirds of the work, and a minor, or it may all be in a single subject or a group of subjects.

Work for the Master's degree may be taken in any of the following subjects:

Astronomy, Biblical Science, Biology and Geology, Chemistry, Economics and Social Science, Education, English, Ethics and Religion, French, German, Greek, History and Political Science, Latin, Mathematics, Philosophy, Physics and Psychology.

The work for the Doctor's degree is three times as heavy as for the Master's. The course is composed of a major, which comprehends half the work, and two minors. These are to be approved by the Faculty before the course is undertaken. Majors are offered in Astronomy, Chemistry, Economics, History, Latin, Mathematics, Philosophy, Psychology and Physics. Minors may be taken in

any of the subjects offered for the Master's degree. An outline of the work accomplished by the candidate, together with his graduating thesis, must be submitted to the Faculty before the degree is voted upon. It must be understood that the degree of Doctor of Philosophy is granted only to students who produce theses evincing the power of original investigation. A reading knowledge of French and German is required for this degree.

As the tuition fees in the Summer School and in the Teachers' College differ from those usually charged at University Hall, a graduate student pays the sum total of the charges for the different courses of instruction which he takes.

For the degree of Master of Arts, the fee for diploma and hood is \$15.00, with a refund of \$3.00 if the fee is paid on or before May 20, and the hood returned in good condition within three days after Commencement.

For the degree of Doctor of Philosophy, the fee for diploma and hood is \$30.00, with a refund of \$3.00 upon return of the hood within three days after Commencement. When a student is excused from attendance upon the exercises of Commencement evening, the usual refund on the fee for diploma and hood will not be made.

Co-ordination of Schools

The different schools of the University are organically related. A student in the College of Liberal Arts may take a year's work in the School of Law in lieu of a year of the elective work in the College of Liberal Arts. It is thus possible for one who wishes to obtain the degree of LL.B., as well as that of A.B., to save a year. When a student has already earned the degree of LL.B., in any school of high standing, he may obtain the degree of A.B. from the College of Liberal Arts by completing three-fourths of the college course, which must include all of the non-elective studies; a major and two minors must constitute a part of the work.

Libraries

The advantage of our location is apparent in many respects, but in none more than in the matter of libraries. Students in the University of Denver have free access to some of the best and largest libraries in the Rocky Mountain country. A list of those open to students will be of interest:

1. The College Library, in the new Carnegie Library Building. This is selected with the students' actual necessities in view. It contains about 7,500 volumes, with many pamphlets and a choice list of current magazines and periodicals.

2. The Law Library in the Law Building, containing about 7,000 volumes.

3. The Public Library, containing 90,000 volumes.

4. The State Library in the Capitol Building, containing over 15,000 volumes, particularly rich in all matters pertaining to the history of Colorado and the West.

5. The State Law Library, containing 15,000 volumes.

6. The Library of the Colorado Scientific Society, containing 4,000 volumes.

Laboratories and Museums

The departments of Chemistry, Physics and Biology are equipped with good working laboratories, supplied with materials and apparatus for the use of the student. The work in these subjects is largely done by the laboratory method, abstract teaching being illustrated by practical experiment and demonstration. Each student in these subjects is required to do a prescribed amount of laboratory work.

The city of Denver contains the finest collections illustrating the flora and fauna of the Rocky Mountain country, in the West. The University possesses an excellent collection of materials in these various lines, which are in constant use by the students. The collection includes about 2,500 species of flowering plants, 500 cryptogams,

500 species of shells, corals and other invertebrates, the typical species of marine animals from the Naples Zoological Station and Wood's Holl, about 3,500 specimens of minerals, and a large collection of American and foreign rocks and fossils, besides a good representation of the minerals of Colorado.

In the Capitol Building, the State Horticultural Society has a fine collection of fruits, grains, insects, etc. There are over five thousand specimens of insects, and a similar number of specimens of the flora of the State.

In the State Mining Bureau can be found a full line of eruptive rocks as classified by the National Museum, and more than ten thousand mineral specimens, labeled and classified according to Dana's Mineralogy. There is, in this department, an excellent library, including a complete set of the reports of the United States Geological Survey.

The State Historical and Natural History Society of Colorado collects and preserves all historical memorabilia which serve to illustrate the life of prehistoric races, or of the aborigines, or which relate to the occupation of the State by the whites. The collection of relics from the cliff dwellings in the Mancos and adjacent canons is the most complete in existence, comprising about 4,000 articles.

The Society maintains a museum of natural history, which contains over 2,500 birds, more than 20,000 botanical specimens, over 8,000 insects, about 7,500 marine and fresh-water invertebrates, and several hundred specimens of fish, reptiles and batrachians.

Most of the large mammals of the State are represented, either entire or by mounted heads; and many of the smaller ones, both by mounted specimens and skins.

Over 2,000 shells are available for a study of conchology. There are several hundred fossils. The library contains 30,000 books, pamphlets and other documents.

The Carter Museum at City Park contains a large number of instructive exhibits.

The Chamberlin Astronomical Observatory

The observatory is the gift of the late H. B. Chamberlin. It is situated on a plat of fourteen acres, four blocks from the college campus, at University Park. There are two stone buildings; the smaller of these, called The Students' Observatory, shelters a six-inch equatorial refractor made by Grubb of Dublin, and a two-inch transit instrument. The equatorial is elaborate in construction, and is provided with driving clock, graduated circles, electric illumination, two filar position micrometers, and full batteries of positive and negative eyepieces.

The main building is 65 feet long, and 50 feet deep, and is constructed of red sandstone. It is crowned by an iron dome, the apex of which is more than 50 feet from the ground. The principal rooms in the building are the dome room, transit room, library, computing room, directors' office, clock room, janitor's quarters, sleeping room, photographic room and store room. The building is heated by steam and lighted by electricity.

The twenty-inch equatorial refractor, which is the principal instrument, has abundantly proved its efficiency. The object-glass is from the hands of Alvan G. Clark, and the crown lens is reversible for photography. G. N. Saegmuller of Washington, D. C., is the maker of the mounting, which embodies some novel features, and is of the highest order of mechanical excellence. The telescope is one of the largest and finest in the country, and is regularly employed in original research. Some of the results are published every few months in American and foreign astronomical periodicals.

The subsidiary instruments are a four-inch steel meridian circle, a standard mean-time clock, a standard sidereal clock, chronometers, three chronographs, a sextant, two solar transits, etc. The cost of the Observatory and its equipment was over \$50,000.

The Observatory makes graduate instruction in practical astronomy possible under favorable circumstances.

The library of the Observatory is being continually increased by purchase and by donations of the publica-

tions of important observatories throughout the world. It already possesses a fine collection of the best star catalogues. The publications of the following prominent observatories are regularly received: The Yerkes, the Lick, the Greenwich, the U. S. Naval, the Harvard, and the Cape of Good Hope. Publications also come from several other observatories in Europe and America. The following periodicals are taken: *Astronomische Nachrichten*, *Astrophysical Journal*, *Publications of the Astronomical Society of the Pacific*, *Astronomical Journal*, *Vierteljahrsschrift der Astronomischen Gesellschaft*, *Popular Astronomy*, *Monthly Notices of the Royal Astronomical Society*, *Bulletin of the American Mathematical Society*, *Journal of the British Astronomical Association*.

The Religious Atmosphere

The life of the University from the beginning has been conducted by men and women of definite religious impulse and unswerving faith in Christianity. No religious tests are imposed on any student. Perfect freedom is guaranteed to every one. At the same time, it is true that the authorities of the University believe that religious development is a matter of primary importance, and that no intellectual culture can compensate for a dwarfing of the religious nature. The atmosphere of the University is frankly and unequivocally Christian. It stands for broad and strong scholarship and the finest moral and religious life.

Chapel exercises are held each morning of the week, except Wednesday, Saturday and Sunday, under the direction of the Faculty. Undergraduate students are required to be present. On Wednesdays the Christian Associations meet at the chapel hour.

Students are heartily welcomed at the doors of churches of all denominations in Denver.

The Christian Associations

The Young Men's Christian Association and the Young Women's Christian Association hold religious

meetings once each week at University Hall. They also conduct several Bible classes and special prayer meetings, and do a large amount of religious work in connection with Sunday schools and churches. Secretaries are employed for both Associations. A bulletin presenting in detail the elaborate work accomplished by the Associations may be had by application at the Chancellor's office.

An organization of Student Volunteers has existed for some years, and has several representatives in foreign fields.

Government

The purpose of the University is to make men and women of strong character. Students are taught that they must learn to do right without continual restraint by the authorities. Rules for conduct are therefore few and simple. The aim of the institution is to develop broad and accurate scholarship, associated with moral integrity. Students are not desired unless they are in sympathy with this aim.

Physical Culture

It is of first consequence that young people should have scientific training in physical culture. With such training almost all young people may come into mature life with good health and with shapely bodies. The University enjoys the services of two competent teachers of physical culture, one for young men and one for young women. Every day throughout the school year regular work in physical culture will be offered. Every student is strongly urged to attend these classes at least three hours each week. This work will probably be made compulsory for Freshmen and Sophomores, beginning in September of 1912. The new gymnasium building is a model of its kind, and adds much to the facilities otherwise available.

The University Field consists of a plot of ground covering nearly two blocks at University Park. It is

equipped with the best constructed and safest grandstand in the West, with a seating capacity of 8,000. A commodious club-house has been built, with shower baths, rubbing tables, manager's closets and lockers for 44 men. The soil of this field is admirably adapted for athletic sports, being neither the hard adobe found on some fields, nor the sand found on others. The quarter-mile running track is twenty-eight feet in width, and the semi-circular curve at each end has a diameter of 250 feet on the running line. Inside of this track lie fields for football and baseball.

There is further provision, at University Park, for baseball, running and tennis. The basketball team uses the fine indoor court in the gymnasium. Track and field athletics, including cross-country running, are cultivated.

Debating Club

There is a debating club for the students of the College of Liberal Arts. This meets for essays, declamations, orations, debates and drill in parliamentary practice. Students are advised by the Faculty to avail themselves of the advantages offered by this society.

Musical Organizations

A College Glee Club has been maintained for some years, which has taken annual trips to several towns of the State, besides giving concerts in Denver. A special collegiate quartette has also been trained, and solo singing has been encouraged. During the past six years, an orchestra has accompanied the Glee Club upon its trips. During the past year a Glee Club for young women has also been maintained.

Student Publications

The regular college paper is named "The Clarion," and is issued weekly, the managers and editors being chosen each year by the students, under the supervision of the Faculty. While the home of this paper is the College

of Liberal Arts, all departments of the University are given space in its columns.

"The Kynewisbok" is the annual issued by the Junior Class, and appears during May. In it, the classes and other student organizations of the entire University are given representation.

A handbook giving information useful for new students is published by the Y. M. C. A. at the opening of each scholastic year.

Honor Society

In order to encourage students to maintain a high grade of scholarship, without sacrificing other features of college life which are universally acknowledged to be of great value, an honor society has been formed. To membership in it certain Seniors are chosen by the Faculty about May 1st of each year. The chief matters considered are scholarship (which must not be below 90%), character, school loyalty, and participation in collegiate activities outside the class-room. The name of the society is Sigma Phi Alpha.

Prizes

The Cranston Prize in Oratory.—Hon. E. M. Cranstons offers twenty dollars in gold as a prize for the best oration delivered in a contest between representatives of the Sophomore and Freshman classes.

The Chancellor's Prize in Oratory.—The Chancellor offers twenty dollars in gold as a prize for the best oration delivered in a contest between representatives of the Senior and Junior classes. In this contest a choice of books is presented to each student who wins a place in the final contest.

The Oratorical Association Prizes.—Two prizes, respectively, of twenty and ten dollars, are offered for the students who take first and second places in an inter-class oratorical contest.

The Johnston Greek Prize.—Mr. W. C. Johnston offers a prize of twenty-five dollars for the best scholarship record in Greek throughout the collegiate course.

The State W. C. T. U. offers twenty-five dollars for the best essay written by any student in any college in Colorado on the subject, "The Relation of Individual Total Abstinence to the Prosperity of the Nation." The best essay may compete for a National prize of one hundred dollars.

Alumni Association

The Alumni organization of the College of Liberal Arts is merged in a larger body, uniting with the alumni of the other colleges of the University. The regular meeting of the Association is held on Wednesday of Commencement week, on which day an address is given, followed by a luncheon.

Fees

The matriculation fee, payable by each new student on entrance, is \$5.00. The tuition fee is \$20.00 per quarter (including Gymnasium fee) and must be paid on the opening day of each quarter. If payment is not made within one week after registration in any quarter, a note must then be given, and the tuition for that quarter becomes \$22.00.

For registration after the opening day of a quarter there is an additional fee of \$1.00. The tuition fee for five recitations or less is \$10.00 per quarter. For more than five recitations per week, the charge for tuition is the regular amount of \$20.00 per quarter. For each extra hour above seventeen, there is a fee of \$1.00. Students in laboratories are charged small fees to cover the cost of materials used. These fees are due at the opening of each quarter. No portion of any fees will be refunded except in case of sickness.

For the degree of Bachelor of Arts, the fee for diploma and hood is \$10.00. If this fee be paid on or before May 20th, and the hood be returned in good con-

dition within three days after Commencement, a refund of \$3.00 will be made; otherwise the refund upon the return of the hood in good order will be only \$2.00.

For the degree of Master of Arts, the fee for diploma and hood is \$15.00, with the same refund as above.

For the degree of Doctor of Philosophy, the fee for diploma and hood is \$30.00, with the same refund as above. When a student is excused from attendance upon the exercises of Commencement evening, the usual refund on the fee for diploma and hood will not be made.

Honor and Service Scholarships

Honor scholarships (covering half the tuition fee) are awarded annually to each one of the accredited high schools in Colorado, and also to each one of the Methodist Episcopal Churches in Colorado that shall pay in full the University apportionment made by the Colorado Conference.

At least two scholarships (in value \$30 each or \$60 together) are awarded to each accredited high school in Colorado. Two scholarships of precisely similar value (\$30 each or \$60 together) are awarded to each Methodist Episcopal Church that shall pay in full the University apportionment made by the Colorado Conference.

The scholarships which are awarded in each high school will be assigned by the Principal (in consultation with his associate teachers) to worthy students who deserve such recognition on account of character, scholarship and interest in approved school activities.

The scholarships which are awarded to each Methodist Episcopal Church will be assigned to worthy young people by unanimous choice of the Pastor, the District Superintendent, the Sunday School Superintendent and the President of the Epworth League.

Twenty-five honor scholarships (in value \$30 each) are awarded annually to selected members of the Sophomore, Junior and Senior classes. These scholarships are assigned by vote of the Faculty of Liberal Arts on recommendation of the Scholarship Committee, for character,

scholarship, interest in approved school activities, and general worthiness. The recipients of these scholarships must hold themselves responsible for limited clerical or other service. All applications for these scholarships must be made in writing and sent to the Chancellor before May 15th. It is understood that the scholastic work and conduct of the recipient of one of these scholarships must be satisfactory or the scholarship may be withdrawn at the end of any quarter.

Forty service scholarships may be awarded to students who are conspicuously worthy. Holders of service scholarships are permitted to earn half of their tuition in each quarter in service designated by the Chancellor. Appointments to Library service are limited to those students who have taken one quarter's work with us in Library Science. In general no student will receive a service scholarship who has not been at the University for at least one quarter. A creditable record in studies and faithful performance of work assigned are also conditions of appointment to University service. An assignment may be cancelled at any time for lack of faithfulness.

No student is permitted to have either an honor or a service scholarship which provides for more than one-half of his tuition in any quarter. This means that every student in college must pay at least half the tuition fee in cash in every quarter.

Honor scholarships which are awarded in the high schools are available only in the College of Liberal Arts and can be used only during the Fall and Winter and Spring quarters of the college year. This means that these scholarships can not be used in the Summer School or in the Saturday College for Teachers.

Honor Scholarships which are awarded in the Methodist Episcopal Churches, and all service scholarships, are available either in the College of Liberal Arts or in the Warren Academy. An honor scholarship which is used in the Warren Academy can provide for only one half the regular tuition fee. The tuition fee in the Acad-

emy is sixteen dollars per quarter (including Gym fee). An honor scholarship which is used there can therefore provide for only eight dollars of that fee in any quarter.

Aid to Students

Many students who go to college in the West must earn their living in whole or in part. To all such students, Denver offers more facilities than any other city in the Rocky Mountain country. Many students in recent years have earned all their living at University Park.

Students who need to earn their living, in whole or in part, while in college, can do so provided they have health and pluck and the spirit of self-sacrifice. A student who can earn his living while in college can earn his living and save money before he comes to college. No student ought to arrive at college without some money, say one hundred dollars or more. With so much money or more on hand, a purposeful student can make his way for a year.

Both young men and young women can find many ways to help themselves, but they ought not to expect to find work in the first week or month at college. It should be kept in mind that students who cannot earn money and save money before coming to college cannot expect to earn money and also carry the studies of the college course.

The Secretary of the Young Men's Christian Association will give much attention to securing employment for students. There is practically no limit to the amount of work which can be secured for purposeful students here in Denver. But we wish to say over and over again that a student ought not to arrive at college without any money on hand.

The University of Denver has a warm welcome for students of moral integrity and earnest purpose. Students of questionable integrity and indifferent purpose are not desired. The registration days are September 9th and 10th.

Board and Rooms

Furnished rooms are rented at University Park at about an average of a dollar a week for each student—when two students occupy the same room. Some rooms are rented at a lower price, and some at a higher. Day board can be secured at \$4.50 per week.

A young woman can live in a Christian family where she helps with the housework for about five hours every day, and where her relation to the family is that of a daughter, and so have her living. A young man can provide for himself in the same way. Students can rent furnished rooms and board themselves. Students can live at University Park at as low a cost as at any point in the West.

Wycliffe Hall is the University's home for young men; room rental costs from one dollar a week upward. Correspondence concerning rooms at Wycliffe Hall should be addressed to Wycliffe Hall, University Park, Colorado.

Young men who do not reside at home, or are not assigned to homes by their parents or guardians, are required to reside in Wycliffe Hall or in other approved houses. Houses which are approved as homes for men are not permitted to provide any rooms for women. All young men who do not reside at home (or in homes assigned by their parents or guardians) are under the supervision of certain designated members of the Faculty.

Templin Hall is the University's home for young women. Correspondence concerning rooms in this house should be addressed to Templin Hall, University Park, Colorado.

Young women who do not reside at home, or are not assigned to homes by their parents or guardians, are required to reside in Templin Hall, or in other approved houses. Houses which are approved as homes for women are not permitted to provide any rooms for men. All

young women who do not reside at home (or in homes assigned by their parents or guardians) are under the supervision of the Dean of Women.

Inquiries of any character will be answered in the first mail when addressed to the Chancellor, University Park, Colorado.

Register of Students

1911-1912

Graduates

| | |
|-----------------------------------|-----------------------|
| Acsell, Robert Pearson..... | Denver |
| Allphin, Helen | Denver |
| Amter, Anna | Denver |
| Beardsley, Ethel Viola..... | University Park |
| Beaver, Lorena Valera..... | Denver |
| Bedford, Sidney McHenry..... | Englewood |
| Best, Albert Clark..... | Boulder |
| Bigelow, (Mrs.) May Tower..... | Denver |
| Bridwell, Charles William..... | Denver |
| Bryan, Roy Elmer..... | Denver |
| Carroon, Frank..... | Las Vegas, New Mexico |
| Chase, Edith Rosamond..... | Denver |
| Colby, Florence | Denver |
| Collister, Thomas Charles..... | Boston |
| Curtis, Rex Vivian..... | Denver |
| Daly, Bernadetta Marie..... | Denver |
| Dean, Jesse Andrew..... | Englewood |
| Dearborn, Barbara | Denver |
| Denchfield, Marietta | Denver |
| Dere, Philip | University Park |
| Doughty, Abbie Hays..... | University Park |
| Eitelgeorge, Benjamin..... | Rome, Indiana |
| Emmons, Marian Hewitt..... | Denver |
| Fergus, Mabel E. | Denver |
| Fletcher, Lida Eleanor..... | Denver |
| Frees, Anna Mary..... | Denver |
| Garrett, Ruth Naomi..... | Denver |
| Gartland, James Lawrence..... | Denver |
| Godsman, Charlotte Josephine..... | Denver |
| Grant, Elizabeth Church..... | Denver |
| Hall, Georgia Lillian..... | Denver |
| Hanson, Mildred Amelia..... | Denver |
| Hayes, Ethelwyn Mae | Denver |
| Henry, Blossom Lida..... | University Park |
| Hocking, Lorena Winchell..... | Denver |
| Holliday, Mary Neppa..... | Denver |

| | |
|---------------------------------------|-------------------------|
| Hornbein, Mildred..... | Las Vegas, N. M. |
| James, Delos Annette..... | Edgewater |
| Jensen, Emeline Maria..... | Sioux Falls, S. Dak. |
| Jones, Edgar..... | Bonavista, Newfoundland |
| Jones, Frederick Samuel..... | Dowling, Mich. |
| Jones, Harry Edgar..... | Denver |
| Kellogg, Hugh Bernard..... | Denver |
| Kellogg, Claude Rupert..... | China |
| Kester, Roy Bernard..... | Denver |
| Lee, Edna May..... | Denver |
| Lee, Olin Pierce..... | Denver |
| Leonard, Sadie | Denver |
| Luce, Marguerite Lester..... | Denver |
| Lyons, Austin Wesley | Greentown, Ind. |
| MacKnight, Joseph Alden..... | Lima, Peru |
| Mallonée, Cleonice Gwendolyn..... | Denver |
| Markusen, Martha Christina..... | Denver |
| Marrs, Emily Margaret..... | Denver |
| Marshall, Madeline Alice | Denver |
| Marshall, Ozetta | Denver |
| McBreen, Barbara | Denver |
| McLeod, Margaret L..... | Denver |
| Meddins, Beatrice Samuella..... | Denver |
| Merriman, Vivien | Denver |
| Messervé, Zell | Denver |
| Milligan, Ella R. Metsker (Mrs.)..... | University Park |
| Morrison, Halcyone | Denver |
| Murray, Ethel | Denver |
| Nestor, Ira F..... | University Park |
| Nuckolls, George Lee..... | University Park |
| Odom, Edward Everett..... | Delta |
| Palmer, Rufus Henry..... | Denver |
| Parker, Selby Carlyle..... | Manila, P. I. |
| Phelps, Grace Eleanor..... | Denver |
| Price, Orville Thaddeus..... | Denver |
| Reini, Helga | Parshall |
| Rich, Mary | Lexington, Mo. |
| Richmond, Myrtle Leila..... | University Park |
| Rupp, Elsie Winifred..... | Winfield, Kansas |
| Russell, Mabel Edith..... | University Park |

| | |
|--|-------------------|
| Schmitz, Lydia Jakoba..... | Denver |
| Scofield, Leslie Wiles..... | Denver |
| Shearer, Anna Manson..... | Denver |
| Shively, Charles Stacy..... | Denver |
| Shoptaugh, James Andrew..... | Denver |
| Sly, William James..... | University Park |
| Sparlin, Nellie | Denver |
| Steele, Lynn Leonard..... | Washington, D. C. |
| Sturgis, Granville Forbes..... | New York |
| Swan, DeWitt Shelton..... | University Park |
| Thompson, Margaret MacDonald (Mrs.)..... | Denver |
| Traver, David Egbert..... | Littleton |
| Trout, Owen Bertram..... | University Park |
| Warfield, Sarah (Mrs.)..... | University Park |
| Weitkamp, Alfred Henry..... | Denver |
| West, Paul Vining..... | Denver |
| Zeitoonian, Hagop Khacher..... | Tarsus |
| Zimmermann, William | Denver |

Seniors

| | |
|------------------------------------|-----------------|
| Amsbary, Gertrude Adele..... | Delta |
| Amter, Anna | Denver |
| Baldwin, Margaret W..... | Denver |
| Ball, Mary Adelaide (Mrs.)..... | Poncha Springs |
| Baxter, James Harlan..... | Paonia |
| Beatty, Margeré Eleanor..... | Denver |
| Bigelow, Maurice Clenen..... | Denver |
| Biggs, Mary Elizabeth..... | Denver |
| Blair, Ramona Alene..... | Denver |
| Boretz, Mary Esther..... | Denver |
| Brown, Emma Marie..... | Denver |
| Chase, Sedelia Gass (Mrs.)..... | Denver |
| Childears, Amos Burdick..... | Ottawa, Kansas |
| Cochran, John Isaac | Eaton |
| Cogswell, Franklin Dewey..... | Denver |
| Cooke, Gertrude Adelle..... | Denver |
| Cooke, Mabel Bilbrough (Mrs.)..... | University Park |
| Cuno, Charles William | University Park |
| Day, Maude Celinda | Denver |
| Denchfield, Marietta | Denver |
| Dere, Joseph Daniel..... | Grand Valley |

| | |
|-----------------------------------|---------------------|
| Donnen, Ralph Royal..... | Denver |
| Drumm, Emma Anna | Denver |
| Edmiston, Rosalie | Denver |
| Elder, Flora Alice | Denver |
| Fike, John William | University Park |
| Fike, Zeta Sweet (Mrs.)..... | University Park |
| Fritz, Lela | Denver |
| Gaines, Autho Presley..... | Loveland |
| Gass, Maude Bell..... | Denver |
| Gilson, Euphrasia..... | Idaho Springs |
| Godsman, Sidney Paul..... | Denver |
| Goodale, Frank Mason..... | Grand Junction |
| Greene, Burnus Raymond..... | Denver |
| Greene, Frank Stephen..... | Washington, D. C. |
| Greenewald, Henry George..... | Denver |
| Hamilton, Jessie May..... | Denver |
| Helwig, Besse Erma..... | Kansas City, Kansas |
| Hendrick, Lester Arlon..... | University Park |
| Hendrick, Mary Edith..... | University Park |
| Henry, Anne Merriman..... | University Park |
| Henry, Frank Joseph..... | University Park |
| Hershey, Janet | Denver |
| Hickman, Vera Merle..... | Denver |
| Hix, Marvin Carson | Wray |
| Hocking, Lorena Winchell | Denver |
| Hood, Jennie Orene | Durango |
| Hopkins, Caroline Dixon..... | Denver |
| Howland, Helen | Denver |
| Howland, Kate | Denver |
| Iliff, Lois Lillian..... | University Park |
| Jones, Frederick Samuel..... | Dowling, Mich. |
| King, Lloyd William..... | Hooper, Neb. |
| Lyons, Waldo Hiram..... | Greentown, Ind. |
| Mallonée, Cleonice Gwendolyn..... | Denver |
| Mayfield, Bessie Virginia..... | Granada |
| Mayo, Ralph Baxter..... | Denver |
| McGovern, Grace | Denver |
| Melzer, Carl | Denver |
| Mercer, Leila | Denver |
| Mercer, Lura Alice..... | Denver |

| | |
|--------------------------------|---------------------|
| Morgan, George William..... | Alexis, Ill. |
| Mozzor, Clara Ruth..... | Denver |
| Myers, Emma Gertrude..... | Del Norte |
| Nicol, Forrest Lee..... | Telluride |
| Nolds, Ida Gertrude..... | Denver |
| Olcovich, Annie | Denver |
| Phelps, Grace Eleanor..... | Denver |
| Pillsbury, Viola Tyson..... | Denver |
| Porter, Myrta Belle..... | Denver |
| Proemmel, Ernst..... | Cuernavaca, N. Mex. |
| Rector, Bird Louise..... | Slater, Mo. |
| Robinson, Eunice | Denver |
| Ruffer, William | Denver |
| Schlumpf, Lily Rosa..... | Denver |
| Scott, Elizabeth Norwood..... | Denver |
| Sinclair, John Fay..... | Reeds Springs, Mo. |
| Sprague, Elsa Mabel..... | Denver |
| Sturgis, Granville Forbes..... | New York |
| Sundt, Bertha Marie..... | Las Vegas, N. Mex. |
| Sutton, Erma May..... | Moulton, Iowa |
| Talbot, Reba Delphene..... | Loveland |
| Thompson, Ruth Elizabeth..... | University Park |
| Wallace, Everett Leland..... | Washington, D. C. |
| Warner, Earle Horace..... | Denver |
| Weller, Walter Wesley..... | Bennett, Colo. |
| Wettengel, Earl | Denver |
| White, Kate | Denver |
| Whitford, Kent Shelton..... | Denver |
| Wilcox, Lawrence Tracy..... | Holyoke |
| Wind, Louis Erastus..... | Hillrose |
| Wolfe, Warren..... | Coalton, Ohio |
| Wood, Georgia Adele..... | University Park |
| Zimmermann, William | Denver |

Juniors

| | |
|------------------------------|--------------|
| Adkisson, Mary E..... | Denver |
| Ammons, Annie Josephine..... | Denver |
| Augustine, Edna Rowena..... | Denver |
| Balcke, Olive Adele..... | Quincy, Ill. |
| Balkin, Martha M..... | Denver |

| | |
|----------------------------------|----------------------|
| Ball, Helen Frances..... | Poncha Springs |
| Barnes, Lulu Bell..... | Denver |
| Bate, Harold Thomas..... | Denver |
| Bayles, Nellie Hall..... | Denver |
| Bradbury, Olive Evelyn..... | Fort Wayne, Ind. |
| Brown, Frances Estelle..... | Denver |
| Bulkeley, Archie William..... | Fruita |
| Burkhalter, Dana Russell..... | Denver |
| Catterall, Henry James..... | Liverpool, England |
| Childears, Amos Burdick..... | Ottawa, Kansas |
| Churchill, Harry Van..... | University Park |
| Connor, Ella Belle..... | Denver |
| Crews, Helen Malvina..... | Denver |
| Curry, Maude..... | Denver |
| Davis, Charley Levi..... | Siloam Springs, Ark. |
| Dill, Helen (Mrs.)..... | Denver |
| Dinsmore, Amy Lulu..... | Denver |
| Doble, Flora Iroqui..... | Denver |
| Duncan, William Ford..... | Denver |
| Farquhar, Mary Luella..... | Guide Rock, Neb. |
| Feldwisch, Bertha..... | Denver |
| Felton, Harold Orin..... | Syracuse, N. Y. |
| Ferris, William Alexander..... | Denver |
| Frelick, Delma..... | Denver |
| Gernon, Ellen Elizabeth..... | Denver |
| Goodnow, Minnie..... | Boston |
| Gumlick, Helen R..... | Denver |
| Hall, Lucy Florence (Mrs.)..... | Englewood |
| Ham, Lillian Beecher (Mrs.)..... | Denver |
| Hassebroeck, Mary Stewart..... | Denver |
| Hessler, Elizabeth..... | Denver |
| Hickey, Harold Lowry..... | Denver |
| Hill, Samuel Rae..... | Edgewater |
| Hills, Edna Mildred..... | Denver |
| Hoel, Alfred Grosvenor..... | University Park |
| Hook, George Emerson..... | Norwood |
| Hopkins, John Dorner..... | Farmington, Mo. |
| Hosmer, Carolyn Elizabeth..... | Denver |
| Hudson, Clough Dana..... | Arvada |
| Huffaker, Vivien Faye..... | Denver |

| | |
|--------------------------------------|--------------------|
| Jenkins, John Chase, Jr..... | Denver |
| Jenness, Richard Esselstyn..... | Denver |
| Johnson, Beth Everett..... | Brownsville, Texas |
| Keith, Lawrence Prescott..... | Denver |
| Kenyon, Harrison Morton..... | Loveland |
| Kerns, Audrey | Denver |
| Klein, Louise | Denver |
| Kurtz, Raymond Lee..... | Denver |
| Large, Ross Lingenfelter..... | Longmont |
| Lewis, Clarence Flavius..... | Edgewater |
| Lucas, David Lemuel..... | Denver |
| Mackie, Inez R..... | Littleton |
| Margot, Arthur | Denver |
| Mayfield, James Russell..... | Granada |
| McDowell, Ada Virginia..... | Denver |
| McKittrick, Homer Earl..... | Rocky Ford |
| McLean, Marjorie | Denver |
| McMeen, George M..... | Denver |
| McNeill, Hazeldeane | Denver |
| Mead, Bennett Loomis..... | Denver |
| Melville, Max Dickinson..... | Denver |
| Mentzer, Jean Elizabeth..... | Denver |
| Mitchell, Nellie May..... | Denver |
| Morris, Ward Heald..... | Platteville |
| Munz, Philip Alexander..... | Denver |
| Outcalt, Ramona | Gunnison |
| Painter, Louisa Genevieve..... | Holyoke |
| Phelps, Helen Bailey | Denver |
| Phillips, Eva Alberta..... | Denver |
| Pierce, Edna | Denver |
| Pifer, Harry Charles..... | Lovington, Ill. |
| Potter, Mae Elizabeth..... | Denver |
| Reed, Grace | Denver |
| Rees, Edwin Arthur..... | Denver |
| Richardson, Hattie Eugenia..... | Denver |
| Robinson, Anna M..... | University Park |
| Rollo, Bertha Deal..... | Denver |
| Royer, Lloyd David..... | Denver |
| Sattler, John Earle..... | Denver |
| Sears, Georgia Ellingham (Mrs.)..... | Denver |

| | |
|---------------------------------|--------------------|
| Sensintaffar, Harriet Emma..... | Denver |
| Sheldon, Katharine..... | University Park |
| Simpson, Beatrice Meddins..... | Denver |
| Sleeper, Sara Eldred..... | Denver |
| Smiley, Marion Lee..... | Denver |
| Smith, May Louise..... | Denver |
| Stark, Sadie Lillian..... | Denver |
| Starks, Clarence Francis..... | Dallas, Texas |
| St. Clair, Belle..... | Denver |
| Steele, Muriel Howard..... | University Park |
| Stewart, Gladys..... | Mt. Pleasant, Iowa |
| Teter, Ruth Margaret..... | Denver |
| Towse, Florence Claire..... | Denver |
| Tredway, Jessie M..... | Denver |
| Tuck, Ernest Everett..... | Greeley |
| Tyler, John Moseley..... | Delway, N. C. |
| Veeder, Paul Revere..... | Monte Vista |
| Vogel, Oscar | Denver |
| Wakeman, Alleah M..... | Denver |
| Warner, Hazel Emily..... | Denver |
| Warren, Ethel Florence..... | Denver |
| White, Mabel Agnes..... | Denver |
| Wilkinson, Martha Ann..... | Denver |
| Williams, Grace Luvenia..... | Denver |
| Williams, Weir Alonzo..... | Manzanola |
| Wilson, Natalie Canda..... | Denver |

Sophomores

| | |
|-------------------------------|-----------------|
| Abbott, Glenna Cordelia..... | Littleton |
| Atkinson, George William..... | Eaton |
| Bambrick, Anna Belle..... | Boise, Idaho |
| Bambrick, Mary | Boise, Idaho |
| Bartholomew, Grace | Denver |
| Beattie, Harry James..... | Denver |
| Bentson, Henry Arthur..... | Ottawa, Kansas |
| Biggs, Florence Amanda..... | Denver |
| Bingham, Anne Elizabeth..... | Denver |
| Bliss, Cora Mabel..... | Denver |
| Boak, Fannie Koelling | Koshkonong, Mo. |

| | |
|----------------------------------|----------------------|
| Boyer, Monta J..... | Denver |
| Bradshaw, Sarah Elizabeth..... | Udly, Mich. |
| Branham, Vernon Carnegie..... | Denver |
| Brubaker, Guy Wellington..... | University Park |
| Card, Nathaniel Forest..... | Manville, Wyo. |
| Carlson, Knute Emil..... | Denver |
| Carr, Lucille Elizabeth..... | Denver |
| Carson, Martha Jane..... | University Park |
| Casey, Olive Adilade..... | Denver |
| Chapman, Florence Lake..... | Denver |
| Chittenden, Besse Lord..... | Denver |
| Chittenden, Rollin d'Evers..... | Denver |
| Colley, Kenneth Henderson..... | Denver |
| Connell, Elsie Catherine..... | Denver |
| Cook, Henry Allen..... | Denver |
| Coonradt, Harry Wayne..... | Marengo, Ill. |
| Craise, Mary Lilian..... | Denver |
| Culbertson, George William..... | Fox, Colo. |
| Cuno, Edith D. Neva (Mrs.)..... | University Park |
| Curry, Rose Lawrence..... | Denver |
| Daly, Julia..... | Denver |
| Darden, William Earle..... | Corning, Calif. |
| Dennis, Mabel Elizabeth..... | Loveland |
| Dewey, Albert Warner..... | Denver |
| Dodds, Mary Agnes..... | Denver |
| Dorsey, Ruth Anna Laird..... | Denver |
| Duthie, Robert Campbell..... | Denver |
| Edwards, Sarah Essie..... | Denver |
| Folsom, Margaret Lilian..... | Denver |
| Gilfillan, Maude..... | Davenport, Iowa |
| Goebel, Pearl Ursula..... | Denver |
| Gray, Gertrude Ripley..... | Denver |
| Greenbaum, Anna J..... | Denver |
| Grigsby, Alice Tyler (Mrs.)..... | Sioux Falls, S. Dak. |
| Grover, Emily Barbara..... | Denver |
| Hahn, Charles Lewis..... | Brush |
| Hall, Chester Biglan..... | Denver |
| Hansen, Marie..... | Denver |
| Hanson, Anna C..... | Gowrie, Iowa |
| Harris, Ruth..... | Denver |

| | |
|----------------------------------|--------------------|
| Herbert, Mary Elizabeth..... | Denver |
| Hill, Zana Asenith..... | Denver |
| Hix, Homer Bennett..... | Wray |
| Hoddle, Mabel Blair..... | Denver |
| Howe, Warren Francis..... | University Park |
| Hoyt, Frances Eldreda..... | Denver |
| Hughes, Doane..... | Denver |
| Isbell, Mary Elnora White..... | Denver |
| Jackson, Philip Leroy..... | Wray |
| Johnson, Katherine Louise..... | University Park |
| Johnson, Sara..... | Denver |
| Jones, George William..... | Dowling, Mich. |
| Kidd, William Jefferson..... | Denver |
| Kinney, Leila..... | Denver |
| Knight, Dorothy Eunice..... | Denver |
| Koch, Walter Albertus..... | Denver |
| Koonsman, George Lee..... | Lamar |
| Kracaw, Forest Alan..... | Telluride |
| Lambert, Margaret B. (Mrs.)..... | Denver |
| Luther, Nellie Leola..... | Denver |
| Malloy, Grace..... | Denver |
| Mason, Ruth Carson..... | Denver |
| Maxwell, Marguerite Augusta..... | Denver |
| McClarty, Julia Elizabeth..... | McMinnville, Tenn. |
| McClave, Ada Grace..... | Denver |
| McClelland, Elizabeth..... | Denver |
| McDonough, Grace Emily..... | Denver |
| McKelvey, Claire Stratford..... | Denver |
| Melzer, Alma Ottilie..... | Denver |
| Miller, Douglas Phillips..... | University Park |
| Miller, Harry Harrison..... | Tobias, Neb. |
| Miller, Harry Holst..... | Denver |
| Miller, Mabel Ethel..... | Littleton |
| Moles, Oliver Clinton..... | Edgewater |
| Mulford, Warren Edgar..... | Denver |
| Muller, Marie Catherine..... | Denver |
| Owen, Humphrey Gray..... | University Park |
| Palmer, Clinton Russell..... | Manzanola |
| Parry, Birdie May..... | Denver |
| Pavella, Minnie Frances..... | Denver |

| | |
|-------------------------------|--------------------|
| Payne, Bert Neal..... | Meridian, Idaho |
| Peterson, Flora Emma..... | Englewood |
| Pierce, Mary Theora..... | University Park |
| Ramsey, Horatio Snow..... | Littleton |
| Reichelt, Vera Elisabeth..... | Denver |
| Robinson, Elbert Wade..... | Denver |
| Roose, Carlota Estelle..... | Denver |
| Russ, Carleton Craig..... | San Antonio, Texas |
| Ryan, Leonore Ethel..... | Denver |
| Sanford, Helen Lois..... | Denver |
| Sawyer, Dora | Denver |
| Schuck, Harold Tiffany..... | Denver |
| Scott, Edwin Alger..... | Denver |
| Seiler, Eleanor Frances..... | Denver |
| Shackelford, Goddard | Denver |
| Shamp, Irene | Denver |
| Skoss, Solomon Leon | Russia |
| Smith, Florence Rees..... | Denver |
| Spangler, Ruth | Denver |
| Steele, Norma Hazel..... | Denver |
| Swank, H. Elizabeth..... | Rock Island, Texas |
| Swayze, Harry Earl..... | Edgewater |
| Symon, Helen Lindsay..... | Denver |
| Teague, Constance Helen..... | Denver |
| Tracy, Harry Pierce..... | Denver |
| Tweedy, Ira Otis..... | Manilla, Iowa |
| Vinacke, Ella Mildred..... | Denver |
| Walsh, Ruth Lorraine | Denver |
| Wattles, Ruth | Mancos |
| Weaver, Hazel Berthella..... | Denver |
| Welch, Ida Alice..... | Oskaloosa, Iowa |
| Wells, Marjorie Edna..... | Denver |
| Wells, Russell Bonney..... | Denver |
| Werthan, Sidney | Denver |
| Wiebelt, Stella Marie..... | Arvada |
| Wilenchick, Louis | Denver |
| Williams, Grayce Alice..... | Denver |
| Winchell, Karl Frederick..... | Loveland |
| Young, Rollin Alonzo..... | Denver |

Freshmen

| | |
|------------------------------------|-----------------|
| Alexander, Bula | Littleton |
| Allen, Dorothy Arabelle..... | University Park |
| Allstrom, Eric Waldemar..... | Victor |
| Altwater, Elsie Emma..... | Denver |
| Anderson, Alfchild Helen..... | Denver |
| Anderson, Harold Rodney..... | Norwood |
| Anderson, Ruth Engred..... | Denver |
| Arthur, Lucile | Denver |
| Babcock, Frank Willard..... | University Park |
| Bachman, Nancy Elizabeth..... | Denver |
| Baker, Lola May..... | Denver |
| Baker, Robert Raymond | Denver |
| Barwig, Frances | Denver |
| Bent, Gertrude Louise..... | Denver |
| Bent, Roger Kane..... | Denver |
| Bertolett, Effie May..... | Denver |
| Besly, Leonard | Denver |
| Biggs, Clyde Hunter..... | Denver |
| Bingham, James Lyman..... | Loveland |
| Blair, Angelica Margaret..... | Denver |
| Bleasdale, Alice | Brush |
| Bleasdale, Lily Laura | Brush |
| Bloom, Joseph Coulon..... | Denver |
| Boge, Ethel Dora..... | Denver |
| Bowman, Elizabeth Walden..... | Denver |
| Briber, Florence Anna | Denver |
| Bricker, Etta | Denver |
| Broderick, Florence Rossettee..... | Denver |
| Brunton, John Teller | Denver |
| Burgess, Jessie Katherine..... | Edgewater |
| Burgess, Ralph Lake | Denver |
| Bush, Cyrus Everette..... | Denver |
| Calvert, Pearl Wilma..... | Denver |
| Cary, Joanna Teresa..... | Denver |
| Carlson, Monroe Oliver..... | Denver |
| Carman, Mary Isabella..... | Denver |
| Carrigan, Margaret Myrtle..... | Denver |
| Chase, Jesse Morris..... | University Park |

| | |
|---------------------------------|-----------------|
| Cobbey, Nell Inez..... | Denver |
| Coit, Frances Marguerite | Denver |
| Coleman, Edith Neilson..... | Denver |
| Cook, Olive Anne..... | Denver |
| Cowell, Ruth Marie..... | Denver |
| Cunningham, Emma Blanche | Wray |
| Davis, Inda Browne..... | University Park |
| Davis, John Thompson..... | Denver |
| Denham, Bertha Virginia..... | Leader |
| Devinny, Cecelia Elizabeth..... | Denver |
| Devinny, Marie Agnes | Denver |
| Dillon, Eva Mary..... | Denver |
| Ditson, Marjorie | Denver |
| Donaldson, Morris Bennett..... | Denver |
| Donnegan, Maizie Ann..... | Denver |
| Emery, Cora Viola..... | Denver |
| Epstein, William Abraham..... | Denver |
| Fairfield, Charles H..... | Denver |
| Fleming, Joseph Stilwell..... | Denver |
| Flynn, Alice Donna..... | Denver |
| Foster, Everett Edward..... | Loveland |
| Franklin, Lucile Martha..... | Denver |
| Fraser, Robert Stuart..... | University Park |
| Freeman, Bernice | Denver |
| Friedman, Lena Lillian..... | Denver |
| Garrison, Marie Linmere..... | Denver |
| Gaymon, Melvin Kimball..... | Denver |
| Gillett, Glenn William..... | Denver |
| Gillham, Ruth Kendall..... | University Park |
| Goodwin, Louis Earl..... | Volga |
| Grant, Marion | Denver |
| Green, Lillian Halcyone..... | Denver |
| Griffith, Jessie Pearl..... | Arvada |
| Grigs, Edward W..... | Sedalia |
| Haffner, Otto Edmonte..... | Denver |
| Hall, Sibbel Katherine..... | Denver |
| Henry, Isabella | Denver |
| Hensley, Elinor | Denver |
| Hepner, Josephine Theodora..... | Denver |
| Herbert, Kathryn | Denver |

| | |
|-----------------------------------|-----------------|
| Herres, Morton M..... | Denver |
| Histed, Nellie Ruth..... | University Park |
| Holbrook, Lillie | Alamosa |
| Holmes, Ethel Elizabeth..... | Denver |
| Hoop, Frances | Denver |
| Hosmer, Evelyn Helen..... | Denver |
| House, Hazelle Lorinda..... | Westminster |
| Howe, Samuel Ransom | Denver |
| Hoyt, Elizabeth Buchanan..... | Denver |
| Hubbard, Andrew Forest..... | Lathrop, Mo. |
| Hurdle, Orville Painter..... | Guernsey, Wyo. |
| Hutchison, Ross Yenter..... | Snyder |
| Hyman, Bertha | Denver |
| Iwase, Takashi | Mikawa, Japan |
| Jacobson, Mabel Harriett..... | Denver |
| Jeffery, Harold Bedford..... | Denver |
| Jones, Faye | Denver |
| Jonke, Josephine Katherine..... | Edgewater |
| Keen, Ethel Therese..... | Denver |
| Kelly, Madeline | Denver |
| Kemp, Wesley William | Fairmont, Neb. |
| Kemp, Zada Evelyn | Fairmont, Neb. |
| Kent, Arthur Harold..... | Denver |
| Keyes, Vesta Zella..... | Denver |
| Koon, Young Ha..... | Seoul, Korea |
| Kopp, Ruth Amanda..... | Denver |
| Larner, Mary Ruth..... | Denver |
| Latenser, Iva Isabella..... | Denver |
| Lawson, Zilpha Alcina..... | Denver |
| Lee, John Edward..... | Denver |
| Lee, Hary Hester | Denver |
| Lee, Muyng Sup..... | Korea |
| Lenardson, Alta Rubymoreau..... | Denver |
| Lewis, Edna Louise..... | Denver |
| Lindberg, Darthula Christine..... | Boulder |
| Lindsay, Martha | Denver |
| Lindsay, Mildred Frances..... | Denver |
| Linn, Irene Frances..... | Denver |
| Lutz, Fred Richard..... | Denver |
| Mack, John Edward..... | Cedaredge |

| | |
|--------------------------------------|-----------------|
| Macomber, Kenneth Adams..... | Denver |
| Maitani, Hikojiro | Japan |
| Maloney, Mary Elizabeth Webster..... | Denver |
| Manby, Lena Ruth | Denver |
| Marron, Adeline Regina..... | Denver |
| May, Dorothy | Denver |
| McCarthy, Nelle | Muncie, Indiana |
| McClelland, Esther..... | Fort Collins |
| McClelland, Henrietta Marie..... | Denver |
| McFarlane, Mildred | Aberdeen, Miss. |
| McIntosh, Kathryn Agnes..... | Waterloo, Iowa |
| McLean, Mary Louise..... | University Park |
| McMurray, Welcome..... | Denver |
| McPherrin, Ruth Elizabeth..... | Denver |
| Miller, Ira Ward..... | Denver |
| Miller, Rebekah Cunningham..... | Grand Junction |
| Mitchell, Nellie May..... | Denver |
| Morcom, Hazel E..... | Denver |
| Moreland, Grace Eleanor..... | Denver |
| Morgan, Mildred Della..... | Denver |
| Mow, James LeRoy..... | Carbondale |
| Moyer, Cora Constance..... | Denver |
| Muncaster, Ethel May..... | Denver |
| Munn, Elmer Milton..... | University Park |
| Murch, Helen Rose..... | Denver |
| Murray, Charles Bellan..... | Denver |
| Nash, William Barton..... | Omaha, Neb. |
| Nielsen, Edna Marie..... | Denver |
| Noble, Leo Adams..... | Billings, Mont. |
| O'Brian, Hannah | Denver |
| Olsen, Maggie Regina..... | Littleton |
| Osborne, George Edward..... | Denver |
| Otto, John | Denver |
| Pakiser, Anna Maria Katherine..... | Denver |
| Palmerton, Ethel Kimball..... | Denver |
| Park, S. Annie..... | Denver |
| Peart, Jennie Alice | University Park |
| Perkins, Hattie Mae..... | Arvada |
| Peyton, Portia Pearla..... | Denver |
| Philips, Helen | Denver |

| | |
|-----------------------------------|-----------------|
| Porter, Maynard | Fruita |
| Prout, Regis Charles | Denver |
| Rader, Cranston Bourquin..... | Denver |
| Randall, Charles Ross..... | Pagosa Springs |
| Rankin, Mary Alice..... | Denver |
| Rector, Mary Frost..... | Slater, Mo. |
| Reed, Isalene Booker (Mrs.)..... | Aurora |
| Reeves, Robert Hood..... | Denver |
| Reid, Roy Lou..... | Canon City |
| Reidy, Ruth Ellen..... | Denver |
| Reinhardt, Ida Elizabeth | Denver |
| Rhinehart, Lulu Josephine..... | Denver |
| Rice, Anna Marie | Denver |
| Rice, Clinton Lewis | Arvada |
| Richards, Hazel May..... | Denver |
| Rider, Ethel May..... | Denver |
| Riffenburg, Harry Buchholz..... | Holyoke |
| Roberts, Richard Samuel..... | Arvada |
| Rosen, Edna Helen..... | Denver |
| Ross, Elaine | Denver |
| Rudolph, Christine Elizabeth..... | Westminster |
| Russ, Mary Edith (Mrs.)..... | Westminster |
| Ryan, Anna | Denver |
| Sanderson, Gladys Gail..... | Arvada |
| Scott, Abigail | Denver |
| Scott, Charles Samuel..... | Fort Morgan |
| Sears, Thaddeus Perc..... | Denver |
| Shaw, Ruth | Denver |
| Shell, Helen | Aberdeen, Miss. |
| Shinn, Carroll | Denver |
| Shotwell, Howard Ford..... | Denver |
| Simpson, Eleanore Elizabeth..... | Denver |
| Sinclair, Vera Anna..... | Denver |
| Slothower, Theodosia May..... | Denver |
| Slutz, Earl Mitchel..... | Denver |
| Smith, Frances | Denver |
| Smith, Martha Elizabeth..... | Broomfield |
| Smith, Myron Harold..... | Holyoke |
| Somers, Florence Alene..... | Arvada |
| Speers, Amy Catherine..... | Denver |

| | |
|-----------------------------------|------------|
| Spencer, Jennett Stevens..... | Englewood |
| Spetnagel, Nellie | Denver |
| Stanchfield, Frances Jean..... | Denver |
| Staub, Isabelle Theodosia..... | Denver |
| Sterling, Eloise | Denver |
| Stevens, Desdelora | Denver |
| Storrie, Robina Crawford..... | Denver |
| Stryker, Ethel | Denver |
| Sullivan, Charles Sumner..... | Holyoke |
| Sumerwell, Ramona Jean | Denver |
| Swayze, Myrtle | Denver |
| Sweet, Stuart Louis | Denver |
| Tait, Lela | Denver |
| Ten Broeck, John Robinson..... | Salida |
| Thatcher, Lorraine Clarke..... | Golden |
| Thompson, Marjorie Jean..... | Denver |
| Thompson, Mary McCook..... | Denver |
| Thurnes, Iona Elizabeth..... | Denver |
| Tindall, Henry Watkins | Denver |
| Trout, George Alexander..... | Walsenburg |
| Tucker, Ethel | Denver |
| Tucker, Harriett | Denver |
| Turcotte, Adelaide Hildegard..... | Denver |
| Underwood, Ota Marie..... | Deer Trail |
| Vasconcells, Jerry Cox..... | Denver |
| Vinacke, Harold Monk..... | Denver |
| Vought, Ida Barrington..... | Denver |
| Waite, Helen | Denver |
| Walek, Frank Martin..... | Sterling |
| Wallack, Hazel | Denver |
| Ward, Thomas Virgil..... | Denver |
| Watson, Clara M..... | Denver |
| Watson, Minnie | Denver |
| Welk, Ellen Louise | Durango |
| Werthan, Esther Johannah | Denver |
| Wikoff, Oscar LeRoy..... | Denver |
| Wilber, Mary | Denver |
| Wilkie, John David..... | Denver |
| Wilkins, Olive Ruth..... | Denver |
| Williamson, Fred Browne..... | Fountain |

| | |
|-------------------------------|-----------|
| Williamson, Hazel Glen..... | Denver |
| Willis, Howard Todd..... | Denver |
| Wisherd, Margaret Amanda..... | Denver |
| Wold, Edna Louise..... | Littleton |
| Womelsdorff, Lucile | Denver |
| Wood, Wilma Barclay..... | Denver |
| Working, Holbrook | Denver |
| Yetter, Merle Alice..... | Denver |
| Ziegler, Walter Horace | Denver |
| Zirkle, Mina Belle..... | Denver |

Saturday College for Teachers

| | |
|---------------------------------|-----------------|
| Acsell, Robert P..... | Denver |
| Adkisson, Mary E..... | Denver |
| Ammons, Annie Josephine..... | Denver |
| Anderson, Lucile | Denver |
| Armstrong, Susan Mildred..... | Denver |
| Baldwin, Margaret W..... | Denver |
| Ball, Mary Adelaide (Mrs.)..... | Poncha Springs |
| Balkin, Martha M..... | Denver |
| Barnes, Lulu B..... | Denver |
| Barrett, Grace E..... | Denver |
| Bashore, Elizabeth | Denver |
| Bertschy, La Veta..... | Denver |
| Bethel, Alice M..... | Denver |
| Bliss, Cora Mabel..... | Denver |
| Boyer, Monta J..... | Denver |
| Brauns, Florence V..... | Denver |
| Brower, Lottie A..... | Denver |
| Brown, Emma Marie..... | Denver |
| Brown, Julia M..... | Denver |
| Bryan, Ethel Ellen..... | Denver |
| Campbell, Eva | Denver |
| Carne, Mildred Calmer..... | Arvada |
| Carson, Mary G..... | Denver |
| Chandler, Iona | Denver |
| Chase, Edith Rosamond..... | Denver |
| Chase, Sedelia Gass..... | Denver |
| Churchill, Harry Van..... | University Park |

| | |
|--|--------------|
| Clarke, Annie M..... | Denver |
| Cooke, Gertrude Adele..... | Denver |
| Corcoran, Cora M..... | Denver |
| Curry, Maude M..... | Denver |
| Curry, Rose Lawrence..... | Denver |
| Daly, Bernadetta Marie..... | Denver |
| Daly, Julia | Denver |
| Daniels, Winifred Jessie (Mrs.)..... | Denver |
| Dill, Helen (Mrs.)..... | Denver |
| Doble, Flora Iroqui..... | Denver |
| Dorsey, Ruth Anna Laird..... | Denver |
| Eberhardt, Laura | Valverde |
| Edmonds, Arthur Carroll | Denver |
| Elstner, Mary | Denver |
| Fallis, Edwina Hume..... | Denver |
| Feldwisch, Bertha | Denver |
| Fergus, Mabel Elizabeth..... | Denver |
| Ferguson, Elizabeth | Denver |
| Fletcher, Lida Eleanor (Mrs.)..... | Denver |
| Frees, Anna Mary..... | Denver |
| Frelick, Delma | Denver |
| Gass, Maude Bell..... | Denver |
| Gillis, May E..... | Denver |
| Glaze, Caroline E..... | Denver |
| Glenn, Ada G..... | Denver |
| Godsman, Charlotte Josephine (Mrs.)..... | Denver |
| Godsman, Sidney Paul..... | Denver |
| Goodnow, Minnie | Boston |
| Gormley, Anna Elizabeth..... | Denver |
| Grant, Elizabeth Church..... | Denver |
| Greenbaum, Anna J..... | Denver |
| Gumlick, Helen Smith..... | Denver |
| Hall, Chester Biglan..... | Denver |
| Hamilton, Jessie May..... | Denver |
| Hance, Virginia | Denver |
| Hanson, Anna C..... | Gowrie, Iowa |
| Hanson, Mildred Amelia..... | Denver |
| Hassebroeck, Mary S..... | Denver |
| Hayes, Ethelwyn Mae..... | Denver |
| Hellesen, Ellen H..... | Denver |

| | |
|--------------------------------------|-------------------|
| Hildebrand, Etta | Denver |
| Hill, Agnes Leona..... | Denver |
| Hoel, Alfred Grosvenor..... | University Park |
| Horn, Ella Lavinia..... | Englewood |
| Hunt, Mary M..... | Westminster |
| Isbell, Mary Elnore White..... | Denver |
| Jensen, C. C. A..... | Denver |
| Jensen, C. C. A. (Mrs.)..... | Denver |
| Jensen, Emeline Maria..... | Vermillion, S. D. |
| Johnson, Ella C..... | Denver |
| Johnson, Hannah | Denver |
| Johnston, Frances E..... | Denver |
| Jones, Robert M..... | Denver |
| Keener, Bertha Louise..... | Denver |
| Keller, Bessie M..... | Denver |
| Keller, Blanche J..... | Denver |
| Klein, Carrie A..... | Denver |
| Klein, Louise | Denver |
| Lane, Florence | Denver |
| Langley, Myrna | Denver |
| Lawson, Albert Bruce..... | Denver |
| Lee, Edna May..... | Denver |
| Lee, Jessie | Denver |
| Leonard, Sadie | Denver |
| Longan, Rose M..... | Denver |
| Lowe, Anna Fredrika..... | Denver |
| Luce, Marguerite Lester..... | Denver |
| Mackie, Inez R..... | Littleton |
| Malloney, Mary E..... | Denver |
| Maloney, Margaret Anastasia..... | Denver |
| Maloney, Mary Elizabeth Webster..... | Denver |
| Markusen, Martha C..... | Denver |
| Marshall, Madeline Alice..... | Denver |
| Marshall, Ozetta | Denver |
| May, Gladys | Denver |
| McBreen, Barbara | Denver |
| McClave, Ada Grace..... | Denver |
| McClure, Adela | Denver |
| McGregor, Maude | Denver |
| McIntyre, John C..... | Denver |

| | |
|------------------------------------|-----------------|
| McLeod, Margaret L..... | Denver |
| McMechen, Elizabeth | Denver |
| McNeal, Blanche Young..... | Denver |
| Merriman, Vivien | Denver |
| Miller, Emma Platt..... | Denver |
| Miller, Mabel Ethel..... | Littleton |
| Mitchell, Nellie May..... | Denver |
| Morrison, Halcyone | Denver |
| Moshér, Abbie | Denver |
| Murray, Ethel | Denver |
| Nestor, Ira F..... | University Park |
| Nicol, Forrest Lee..... | Telluride |
| Norton, Olive | Denver |
| Olcovich, Annie | Denver |
| Palmer, Rufus Henry..... | Denver |
| Parsons, Jessalyn Louise..... | Denver |
| Peck, Vera Marana..... | Denver |
| Pfrimmer, Edmonia | Denver |
| Poff, Rose B..... | Denver |
| Pollock, Emma E..... | Denver |
| Richardson, Hattie Eugenia..... | Denver |
| Rollo, Bertha Deal..... | Denver |
| Sawyer, Dora | Denver |
| Sawyer, Mabel Eldora..... | Denver |
| Schisler, Alla Pearle..... | Denver |
| Scott, Elizabeth Norwood..... | Denver |
| Scrafford, Mabel M..... | Denver |
| Sears, Maria Childress (Mrs.)..... | Denver |
| Sensintaffer, Emma Harriett..... | Denver |
| Shaw, Marie H..... | Denver |
| Shoptaugh, James Andrew..... | Denver |
| Simpson, Beatrice Meddins..... | Denver |
| Sinclair, Myra Antonides..... | Denver |
| Sleeper, Sara Eldred..... | Denver |
| Smith, May Louise..... | Denver |
| Sparlin, Nellie | Denver |
| Spicer, Claude C..... | Denver |
| Stillman, Edith May..... | Denver |
| Stretcher, Clarence E..... | Denver |
| Stryker, Ethel | Denver |

| | |
|-------------------------------|-----------|
| Teter, Ruth Margaret..... | Denver |
| Traver, David Egbert..... | Littleton |
| Tredway, Jessie M..... | Denver |
| Tucker, Harriett | Denver |
| Turner, Elva M..... | Denver |
| Wakeman, Alleah M..... | Denver |
| Walker, Jessie | Denver |
| White, Mabel Agnes..... | Denver |
| Wilson, Natalie Canda..... | Denver |
| Wisherd, Margaret Amanda..... | Denver |
| Woodson, Marie L..... | Denver |
| Zeilman, Clyde W..... | Denver |

Summer School

| | |
|----------------------------------|-----------------|
| Abbott, Glenna Cordelia..... | Littleton |
| Altman, Harry | Denver |
| Anderson, Lucile | Denver |
| Anderson, Rudolph Earl..... | Denver |
| Balcke, Olive Adele..... | Quincy, Ill. |
| Bambrick, Anna Belle..... | Boise, Idaho |
| Bambrick, Mary..... | Boise, Idaho |
| Bartholomew, Madge T. Hurst..... | Ventura, Cal. |
| Barwig, Frances | Denver |
| Beardsley, Ethel Viola..... | University Park |
| Bentson, Henry Arthur..... | Ottawa, Kan. |
| Besly, Leonard | Denver |
| Best, Elbert Clark..... | Boulder |
| Boak, Fannie Koelling..... | Koshkonong, Mo. |
| Boge, Ethel Dora..... | Denver |
| Boretz, Mary Esther..... | Denver |
| Bricker, Etta | Denver |
| Brown, Emma Marie..... | Denver |
| Burgess, Jessie Catherine..... | Edgewater |
| Calvert, Pearl Wilma..... | Denver |
| Carrigan, Margaret Myrtle..... | Denver |
| Chase, Sedelia Gass..... | Denver |
| Childears, Amos Burdick..... | Ottawa, Kan. |
| Chittenden, Besse Lord..... | Denver |
| Cisler, Gertrude Maude..... | Denver |

| | |
|------------------------------------|--------------------|
| Cochran, John Isaac..... | Eaton |
| Colby, Florence | Denver |
| Collister, Thomas Charles..... | Boston |
| Cooke, Gertrude Adele..... | Denver |
| Coonradt, Harry Wayne..... | Marengo, Ill. |
| Cronin, Mary | Denver |
| Crooks, Esther Bradway..... | Monte Vista |
| Curry, Rose Lawrence..... | Denver |
| Dearborn, Barbara | Denver |
| Devinny, Cecilia Elizabeth..... | Denver |
| Devinny, Marie Agnes..... | Denver |
| Dill, Helen (Mrs.)..... | Denver |
| Doble, Flora Iroqui..... | Denver |
| Dorsey, Ruth Anna Laird..... | Denver |
| Duncan, William Ford..... | Denver |
| Dungan, Edith Lillian..... | Lincoln, Neb. |
| Edmonds, Arthur Carroll..... | Denver |
| Edwards, Sarah Essie..... | Denver |
| Elder, Flora Alice..... | Denver |
| Evarts, Grace Frances..... | St. Louis, Mo. |
| Fairfield, Charles H..... | Denver |
| Farquhar, Mary Luella..... | Guide Rock, Neb. |
| Felton, Harold Orin..... | Syracuse, N. Y. |
| Ferris, William Alexander..... | Denver |
| Flanders, Maude Myrtle (Mrs.)..... | Bennett |
| Fletcher, Lida Eleanor..... | Denver |
| Friedman, Lena Lillian..... | Denver |
| Gardiner, Julia Hilda..... | Denver |
| Gardner, Clara Pearl..... | Yuma |
| Garrett, Ruth Naomi..... | Denver |
| Gass, Maude Bell..... | Denver |
| Gilfillan, Maude | Davenport, Iowa |
| Gillett, Glenn William..... | Denver |
| Gormley, Anna Elizabeth..... | Denver |
| Gottstein, Tillie | Denver |
| Grant, Marion | Denver |
| Griffith, Jessie Pearl..... | Arvada |
| Grigs, Edgar W..... | Sedalia |
| Grigsby, Alice Tyler (Mrs.)..... | Sioux Falls, S. D. |
| Gurley, Myrtle Catherine..... | Denver |

| | |
|-----------------------------------|--------------------|
| Haffner, Otto Edmonte..... | Denver |
| Hall, Georgia Lillian..... | Denver |
| Hall, Lucy Florence (Mrs.)..... | Englewood |
| Ham, Lillian Beecher (Mrs.)..... | Denver |
| Hansen, Marie | Denver |
| Hanson, Anna C..... | Gowrie, Iowa |
| Harris, Bernice Catherine..... | Denver |
| Hastings, Clara May..... | Englewood |
| Henry, Anne Merriman..... | University Park |
| Henry, Blossom Lida..... | University Park |
| Henry, Isabella | Denver |
| Hipp, Carrie Turner (Mrs.)..... | Denver |
| Hocking, Lorena Winchell..... | Denver |
| Holliday, Mary Neppa..... | Denver |
| Holmes, Ethel Elizabeth..... | Denver |
| Hospe, Mina Frances..... | Denver |
| House, Hazella Lorinda..... | Westminster |
| Hyman, Bertha | Denver |
| Iliff, Lois Lillian..... | University Park |
| Johnson, Beth Everett..... | Brownsville, Texas |
| Jones, Frederick Samuel..... | Dowling, Mich. |
| Jonke, Josephine Katherine..... | Edgewater |
| Keith, Lawrence Prescott..... | Denver |
| Keller, Bessie M..... | Denver |
| Kellogg, Hugh Bernard..... | Denver |
| Kelly, Madeline | Denver |
| Kopp, Ruth Amanda..... | Denver |
| Latenser, Iva Isabella..... | Denver |
| Lawson, Zilpha Alcina..... | Denver |
| Lenardson, Alta Ruby Moreau..... | Denver |
| Lewis, Edna Louisa..... | Denver |
| Lewis, Erin | Denver |
| Lindberg, Darthula Christine..... | Boulder |
| Lindsay, Martha | Denver |
| Lindsay, Mildred Frances..... | Denver |
| Linn, Irene Frances..... | Denver |
| Lovering, Esther Ann Cecelia..... | Denver |
| Lucas, David Lemuel..... | Denver |
| Luce, Marguerite Lester..... | Denver |
| Mallonée, Cleonice Gwendolyn..... | Denver |

| | |
|--------------------------------------|----------------------|
| Maloney, Mary Elizabeth Webster..... | Denver |
| Marr, Helen Lewellyn..... | Sabula, Iowa |
| May, Dorothy | Denver |
| McClave, Ada Grace..... | Denver |
| McClellan, Nell Eunice..... | Denver |
| McClelland, Elizabeth | Denver |
| McClelland, Esther | Fort Collins |
| McClelland, Henrietta Marie..... | Denver |
| McDowell, Ada Virginia..... | Denver |
| McKelvey, Claire Stratford..... | Denver |
| McKittrick, Homer Earl..... | Rocky Ford |
| McLean, Marjorie | Denver |
| McMeen, George M..... | Denver |
| Meddins, Beatrice Samuella..... | Denver |
| Mee, Katherine..... | Oklahoma City, Okla. |
| Melzer, Carl | Denver |
| Messervé, Zell | Denver |
| Mitchell, Elnora | Denver |
| Mitchell, Nellie May..... | Denver |
| Moody, Florence Marion..... | Denver |
| Moran, Mary Agnes..... | Manhattan, Ill. |
| Morcom, Hazel E..... | Denver |
| Moreland, Grace Eleanor..... | Denver |
| Morris, Bertha Vie..... | Denver |
| Moyer, Cora Constance..... | Denver |
| Nelson, Esther Elizabeth..... | Denver |
| Nielsen, Edna Marie..... | Denver |
| Nolds, Ida Gertrude..... | Denver |
| Odom, Edward Everett..... | Delta |
| Olsen, Maggie Regina..... | Littleton |
| Orth, Blanche Beryl..... | Denver |
| Pakiser, Anna Maria Katherine..... | Denver |
| Park, S. Annie..... | Denver |
| Parker, Frances Edna..... | Denver |
| Perkins, Hattie Mae..... | Arvada |
| Peterson, Flora Emma..... | Englewood |
| Philips, Helen | Denver |
| Phillips, Moses | Denver |
| Pierce, Edna | Denver |
| Plummer, Sherman Wright..... | Denver |

| | |
|--|--------------|
| Porter, Myrta Belle..... | Platte, Neb. |
| Potter, Mae Elizabeth..... | Denver |
| Quinlivan, Margaret May..... | Denver |
| Rader, Cranston Bourquin..... | Denver |
| Reed, Isalene Booker (Mrs.)..... | Aurora |
| Reidy, Ruth Ellen..... | Denver |
| Reinhardt, Ida Elizabeth..... | Denver |
| Reini, Helga | Parshall |
| Rhinehart, Lulu Josephine..... | Denver |
| Rice, Anna Marie..... | Denver |
| Rider, Ethel May..... | Denver |
| Robinson, Anna Maria..... | Greeley |
| Robinson, Eunice Gertrude..... | Denver |
| Royer, Lloyd David..... | Denver |
| Rudolph, Christine Elizabeth..... | Westminster |
| Russ, Mary Edith (Mrs.)..... | Denver |
| Ryan, Anna | Denver |
| Schlumpf, Lily Rosa..... | Denver |
| Scott, Abigail | Denver |
| Shackelford, Goddard | Denver |
| Shearer, Anna Manson..... | Denver |
| Sheppard, Bessie Gertrude..... | Denver |
| Shinn, Carroll | Denver |
| Shores, Hattie Euphemia Stevenson..... | Denver |
| Simpson, Eleanore Elizabeth..... | Denver |
| Sinclair, Vera Anna..... | Denver |
| Smith, Martha Elizabeth..... | Broomfield |
| Somers, Florence Alene..... | Arvada |
| Sparlin, Nellie | Denver |
| Spencer, Jennett Stevens..... | Englewood |
| Spetnagel, Nellie | Denver |
| Staub, Isabelle Theodosia..... | Denver |
| Steele, Lynn Leonard..... | Denver |
| Stone, Boyd Eldon..... | Denver |
| Sturgis, Granville Forbes..... | New York |
| Terry, Edna Myrtle..... | Canon City |
| Thatcher, Lorraine Clarke..... | Golden |
| Thompson, Mary McCook..... | Denver |
| Thurnes, Iona Elizabeth..... | Denver |
| Tobin, Saidie Mae..... | Denver |

| | |
|------------------------------------|-----------------|
| Trout, George Alexander..... | Walsenburg |
| Trout, Owen Bertram..... | University Park |
| Tucker, Ethel | Denver |
| Tucker, Harriett | Denver |
| Turcotte, Adelaide Hildegarde..... | Denver |
| Underwood, Ota Marie..... | Deer Trail |
| Walker, Jessie | Denver |
| Watson, Clara M..... | Denver |
| Watson, Hazel Minnie..... | Denver |
| Wattles, Ruth | Denver |
| Weber, Edith | Denver |
| Weirich, Edna Genevieve..... | Denver |
| Weitkamp, Alfred H..... | Denver |
| Welch, Ida Alice..... | Oskaloosa, Iowa |
| Wells, Luther Warder..... | Tulsa, Okla. |
| Werthan, Esther Johannah..... | Denver |
| Wisherd, Margaret Amanda..... | Denver |
| Womelsdorff, Lucile | Denver |
| Zimmermann, William | Denver |

Unclassified

| | |
|----------------------------------|------------------------|
| Appel, Freda Frank (Mrs.)..... | East Las Vegas, N. M. |
| Bourn, Frieda Elisabeth..... | Delta |
| Braden, John Carroll..... | Rocky Ford |
| Cavanaugh, Margaret Maysel..... | East Las Vegas, N. M. |
| Cobb, Loucetta Temple..... | Las Vegas, N. M. |
| Edginton, Nelle Edward..... | Denver |
| Elam, Burnley Richardson..... | Denver |
| Fields, Mark Joseph..... | Denver |
| Hendrickson, William Wesley..... | Denver |
| Hutchison, Jennie Pearl..... | El Dorado Springs, Mo. |
| Jackson, Edward (Mrs.)..... | University Park |
| King, Orman Calvin..... | Denver |
| Link, Edmondson Benjamin..... | Las Croces, N. M. |
| Martin, Dana Butler..... | Denver |
| McGinn, Mary Dillon (Mrs.)..... | East Las Vegas, N. M. |
| Meyers, Harry Christopher..... | Carroll, Iowa |

| | |
|------------------------------|-----------------------|
| Miller, Earl Burns..... | Denver |
| Moran, Mary Agnes..... | Manhattan, Ill. |
| O'Brian, Florence | Denver |
| Papen, Bertha..... | East Las Vegas, N. M. |
| Papen, Helen..... | East Las Vegas, N. M. |
| Rand, June Beatrice..... | Denver |
| Read, Byron Justus..... | East Las Vegas, N. M. |
| Ross, May..... | East Las Vegas, N. M. |
| Saiki, Azuma | Japan |
| Thode, Marion Margaret..... | Denver |
| Van Horne, Arthur Henry..... | East Las Vegas, N. M. |
| Vasconcels, Jerry Cox..... | Denver |
| Wells, Luther Warder..... | Tulsa, Okla. |
| Young, Theodore | Denver |
| Zingg, Ottway C..... | East Las Vegas, N. M. |

Candidates for Degrees at the Commencement of 1912

Bachelor of Arts

Gertrude Adele Amsbary
 Anna Amter
 Mary Adelaide Ball
 James Harlan Baxter
 Margeré Eleanor Beatty
 Maurice Clenen Bigelow
 Mary Elizabeth Biggs
 Ramona Alene Blair
 Mary Esther Boretz
 Emma Marie Brown
 Sedelia Gass Chase
 John Isaac Cochran
 Franklin Dewey Cogswell
 Gertrude Adelle Cooke
 Mabel Bilbrough Cooke
 Charles William Cuno
 Maude Celinda Day
 Marietta Denchfield
 Joseph Daniel Dere
 Ralph Royal Donnen
 Emma Anna Drumm
 Rosalie Edmiston
 Flora Alice Elder
 John William Fike
 Zeta Sweet Fike
 Lela Fritz
 Autho Presley Gaines
 Euphrasia Mary Gilson
 Sidney Paul Godsman
 Frank Mason Goodale
 Burnus Raymond Greene
 Jessie May Hamilton
 Anna Hanson
 Besse Erma Helwig
 Lester Arlon Hendrick
 Mary Edith Hendrick
 Anne Merriman Henry
 Frank Joseph Henry
 Janet Hershey
 Vera Merle Hickman
 Marvin Carson Hix
 Lorena Winchell Hocking
 Jennie Orene Hood
 Caroline Dixon Hopkins
 Helen Howland

Kate Howland
 Frederick Samuel Jones
 Lloyd William King
 Waldo Hiram Lyons
 Cleonice Gwendolyn Mallonée
 Bessie V. Mayfield
 Ralph Baxter Mayo
 Grace Pancratia McGovern
 Carl Melzer
 Leila Mercer
 Lura Alice Mercer
 George William Morgan
 Clara Ruth Mozzor
 Emma Gertrude Myers
 Forrest Lee Nicol
 Ida Gertrude Nolds
 Annie Olcovich
 Grace Eleanor Phelps
 Viola Tyson Pillsbury
 Ernst Proemmel
 Bird Louise Rector
 Eunice Gertrude Robinson
 William Ruffer
 Lily Rosa Schlumpf
 Elizabeth Norwood Scott
 John Fay Sinclair
 Elsa Mabel Sprague
 Granville Forbes Sturgis
 Bertha Marie Sundt
 Erma May Sutton
 Reba Delphene Talbot
 Ruth Elizabeth Thompson
 Everett Leland Wallace
 Earle Horace Warner
 Walter Wesley Weller
 Earl Wettengel
 Kate White
 Mabel Agnes White
 Kent Shelton Whitford
 Lawrence Tracy Wilcox
 Louis Erastus Wind
 Warren Wolfe
 Georgia Adele Wood
 William Zimmermann

Master of Arts

Helen Allphin,
 A.B., University of Denver.
 Anna Amter,
 A.B., University of Denver.
 Ethel Viola Beardsley,
 A.B., University of Denver.
 Sidney McHenry Bedford,
 A.B., University of Denver.

Charles William Bridwell,
 A.B., University of Denver.
 Roy Elmer Bryan,
 A.B., University of Denver.
 Thomas Charles Collister,
 A.B., University of Denver.
 Marietta Denchfield,
 A.B., University of Denver.

- Philip Dere, Jr.,
A.B., University of Denver.
- Benjamin Eitelgeorge,
A.B., University of Denver.
- Marian Hewitt Emmons,
A.B., Westminster College.
- Mabel Elizabeth Fergus,
A.B., University of Denver.
- Lorena Winchell Hocking,
A.B., University of Denver.
- Delos Annette James,
A.B., University of Denver.
- Frederick Samuel Jones,
A.B., University of Denver.
- Roy Bernard Kester,
A.B., Missouri Wesleyan University.
- Edna May Lee,
A.B., University of Denver.
- Olin Pierce Lee,
A.B., University of Denver.
- Austin Wesley Lyons,
A.B., University of Denver.
- Cleonice Gwendolyn Mallonée
A.B., University of Denver.
- Rufus Henry Palmer,
A.B., University of Denver.
- Grace Eleanor Phelps,
A.B., University of Denver.
- Mary Rich,
A.B., University of Denver.
- Lydia Jakoba Schmitz,
A.B., University of Denver.
- Lynn Leonard Steele,
A.B., University of Denver.
- Granville Forbes Sturgis,
A.B., University of Denver.
- Alfred Henry Weitkamp,
A.B., Otterbein University.
- William Zimmermann,
A.B., University of Denver.
S.T.D., Temple University.
M.D., University of Colorado.

Doctor of Philosophy

- Edgar Jones,
A.B., Boston University.
B.D., Boston University.
- Harry Edgar Jones,
Ph.B., Morningside College.
A.M., University of Denver.
- Joseph Alden MacKnight,
A.B., University of Denver.
A.M., Columbia University.
- George Lee Nuckolls,
A.B., Epworth University.
A.M., University of Denver.
- Hagop Khacher Zeitoonian,
A.B., St. Paul's College, Tarsus.
B.D., Marash Theological Seminary.

Doctor of Divinity

CAUSA HONORIS

- Ervin Nathaniel Edgerton,
A.B., University of Denver.
S.T.B., University of Denver.
- Charles Wesley Huett,
A.B., University of Denver.
A.M., University of Denver.
- Orville Knowles Maynard,
A.B., Cornell College.
A.M., Cornell College.

Bachelor of Laws

- Frazer Arnold
- John B. Betts
- Robert Benjamin Croix
- Alexander B. Crosswhite
- Frank L. Fetzer
- Chris. G. Garbarino
- Andrew F. James
- Raleigh L. Juda
- Walter S. Klein
- Frank McLaury
- Charles M. Rose
- Michael F. Ryan
- Jacob V. Schaezel
- Walter E. Schwed
- Harold A. Senter
- Silman L. Smith
- Henry W. Toll
- Clarence Werthan
- Ivor O. Wingren
- Clyde W. Zeilman

Doctor of Dental Surgery

William Harvey Baker
John William Barnes
Daniel Bate
Samuel Roscoe Beckley
Ernest William Boyens
Archie Bryan Brusse
Adelbert Brockett Buck
George Arthur Bullard
Robert Elmer Buvens
Deane Lyle Chamberlain
David Lewis Cohen
William Henry Fluallen
Edmund Theodore Glessner
Richard Cline Greene
Fenneth Henderson
David Bennett Hill

Koy Virgil Hogue
George K. Inouye
Earle Ralph Little
Clarence Osborn McMillan
Harley Ross Peterson
Fred Ward Reiter
Stewart Franklin Richards
Joe Arthur Rosenberg
Leon Rubins, A.B.
James Henry Samuel
Ida Shapiro
Allen Fuller Templeton
Marcus Henry Volk
Charles Hunter Watson
Alton Oscar Wilson
Thomas Howard Wood

Bachelor of Commercial Science

Ira N. Crabb
Harry D. Hanigan
Christian L. Heller

Walter R. Lonsdale
Gerald A. Torrence
E. Allen Whitney

Summary of Students

AT UNIVERSITY PARK

| | |
|-------------------------|-----|
| Graduate Students | 94 |
| Seniors | 94 |
| Juniors | 111 |
| Sophomores | 130 |
| Freshmen | 248 |

| | |
|---|-----|
| Liberal Arts and Graduate Students..... | 677 |
| (Last year, 588.) | |

| | |
|------------------------------------|-----|
| Saturday College for Teachers..... | 159 |
| Summer School | 204 |
| Unclassified | 31 |
| Warren Academy | 129 |

| | |
|-------------------------|-----|
| Total in this list..... | 523 |
|-------------------------|-----|

| | |
|---------------------------------|-------|
| Total in these departments..... | 1,200 |
| Counted twice | 259 |

| | |
|--|-----|
| Net list of University Park Students.. | 941 |
|--|-----|

IN THE HEART OF DENVER

| | |
|--------------------------------|-----|
| School of Law..... | 114 |
| College of Dental Surgery..... | 115 |
| School of Commerce..... | 44 |

| | |
|------------------------------------|-----|
| Total in Professional Schools..... | 273 |
|------------------------------------|-----|

| | |
|--|-------|
| Grand total of University Students.... | 1,214 |
|--|-------|

Summary of Graduates

We have this year our largest graduating class. The list is as follows:

| | |
|--|-------|
| With A.B. degree..... | 89 |
| With A.M. degree..... | 28 |
| With Ph.D. degree..... | 6 |
| <hr/> | |
| Total in Liberal Arts and Graduate School..... | 123 |
| Honorary degrees | 3 |
| <hr/> | |
| Total in cursu and causa honoris..... | 126 |
| With LL.B. degree..... | 20 |
| With D.D.S. degree..... | 32 |
| With B.C.S. degree..... | 6 |
| <hr/> | |
| Total in Law, Dentistry and Commerce..... | 58 |
| <hr/> | |
| Grand total for the year..... | 184 |
| Summary of All Degrees to this Commencement. | |
| Liberal Arts and Graduate School, 1884 to 1899, 16 years (average 6 per year)..... | 96 |
| Same Departments, 1900 to 1912, 13 years (average 70 per year)..... | 909 |
| Liberal Arts and Graduate School Degrees..... | 1,005 |
| Honorary Degrees | 83 |
| <hr/> | |
| Total Liberal Arts and Honorary Degrees..... | 1,088 |
| Professional Schools previous to this date..... | 1,207 |
| Professional Schools at this Commencement..... | 58 |
| <hr/> | |
| Total Professional School Degrees..... | 1,265 |
| <hr/> | |
| Grand total of Degrees in all Departments.. | 2,353 |

THE LIBRARY OF THE
AUG 29 1936
UNIVERSITY OF ILLINOIS

The Williamson-Haffner Co., Denver.

“The Pioneer School of Higher Learning
in this State.”

—*Colorado Supreme Court.*

CHARTER GRANTED BY THE LEGISLATIVE ASSEMBLY OF THE
TERRITORY OF COLORADO. MARCH 5TH, 1864



Efficiency

EFFICIENCY is the conspicuous idea, in our times, in the educational, the religious, the governmental, the commercial and the industrial life of the world. The University of Denver will offer the following courses in this subject during the ensuing year, and will supplement them as occasion shall warrant.

1. *Industrial Efficiency:* A Study of the Principles of Scientific Management and their Application.
2. *Mental Efficiency:* The Application of the Principles of Efficiency in the Development of Mental Power, Memory Culture, Imagination and Judgment.

These new courses will be under the supervision of Ida Kruse McFarlane, A.M., Mary Lowe Dickinson, Professor of English, with Mr. Charles William Cuno, A.B. as instructor.